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MONTHLY REPORT

OF

THE AGRICULTURAL DEPARTMENT

FOR

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MONTHLY REPORT.

DEPARTMENT OF AGRICULTURE,
Washington, D. C., March, 1865.

The leading statistical tables published in this report are those showing the numbers of the farm stock of the loyal States in January, 1865. They are highly important, and admonish all farmers to every effort by which this stock could be increased. The decrease, except in sheep, is very great. With the return of peace, which cannot now be distant, the industry of the farm and plantation will resume its former activity, and when the vast labor now engaged in the glorious and successful defence of that Union which alone can secure prosperity to us shall be released from the trials of war, there will arise a most active demand for all kinds of stock that will take the place of the war demand, and thus sustain present prices for stock to a greater degree than will be commanded by breadstuffs.

It is gratifying to see the large increase of sheep during the present year. It is 4,300,878. The estimated amount of the wool clip for 1865 is 114,589,076 pounds—an approximation that will not vary much from the actual amount. As wool has not been raised to so high a price, comparatively, as other textile materials have been, it will not meet with so great a decline, nor one corresponding to the decrease in the value of gold. Every encouragement, therefore, is held out to continued exertions for the increase of sheep, especially of the breeds best adapted to the production of combing-wool and mutton.

The continued increase of our exports of butter and cheese, whilst that of so many of our agricultural productions is rapidly decreasing, warn those interested in the dairy business that the decrease of cows, as appears from the tables, if not checked, will result unfavorably to their business, as well as keep up the prices of these products of the dairy. This decrease should be checked by withholding cows from slaughter, and encouraging the raising of more than is now done.

The decrease of hogs is so large that the hog product, even with favorable crops of clover and corn, must continue high. The inducements to their increase, even in the face of the present high prices of grain, are great, and farmers should look forward now to such an increase, if they would avail themselves of the more profitable price for pork when there shall be a decline in the prices of grain.

Accompanying these statistical tables is an article on the grasses, a subject having the closest connexion with stock production. The large amount of unimproved lands forms an investment of capital now almost profitless, but which can be made of immediate profit in the manner pointed out by this article.

When we see that even in Great Britain stock-raising is much more profitable than grain production, and that there is a strong tendency there to an increase of the former, the American farmer, especially under present circumstances, should not hesitate to increase his pastures and meadows to the extent that farm labor will permit.

The Commissioner is receiving letters every day from the practical farmers of the country asking that the monthly reports be forwarded to them. The regular correspondents also urge an increased distribution of them, to meet, as far as possible, the urgent applications for them by farmers. As this publication is national in its nature, presenting the condition of agriculture from a standpoint that looks at the whole country, and entirely avoids local objects and purposes, and hence, unlike any other publication, there is every reason why these requests should be complied with. Certainly nothing could be more agreeable to me than to place it in the hands of every person asking for it, that I might thus express my gratitude for the cordial approbation I have received from the farmer for my efforts to advance his prosperity; but under the discretionary power to print this report, I cannot much increase the number now published. It rests with Congress to order this, and to it should applications be made through the members especially representing agricultural districts. What I can do shall most cheerfully be done.

ISAAC NEWTON, *Commissioner.*

When the waters were separated from the land the Creator commanded it to bring forth grass, and the earth brought forth grass. It preceded the creation of animal life, for the latter was dependent upon it; and to this time that dependence continues.

In this report is published the amount of the farm stock of the nation. What subject could be more appropriate as an accompanying article to these tables than the consideration of those grasses by which this stock is principally sustained?

The word grass, in its botanical sense, includes the cereals and excludes the clovers; but, as commonly used, it excludes the former and includes the latter. In this article it will be used in the common sense, and those grasses only mentioned that are generally cultivated for meadows and pastures. These are few in number; but few as they are, in value they exceed the national crop of Indian corn.

In 1864 the corn crop, as valued by this department, is estimated at $527,718,183, and the hay crop at $365,707,074. No census has ever been taken of the acreage and annual value of pasture lands; but taking the number of stock and the usual value of their pasturage for the season as a basis, the value of their pasturage would be $187,392,511. Added to the value of the hay, the total value of the grasses would be $553,099,585.

But their *relative* importance may be further seen by considering the cost of the cereal and textile crops in comparison with the hay and pasture crops. The one is derived from *annual* plants, for the cultivation of which the soil must be annually ploughed deeply, and tilled for weeks, and demanding a harvest labor far more expensive than the hay crop. Nor should their effects on the soil be overlooked in the estimate we are making. The grasses are perennial, and they enrich the soil, whilst the cereals and textile plants take from it even to exhaustion. So considered, well may the farmers of Kentucky boast of their blue-grass pastures, which for fifty years have remained unbroken by the plough, sustaining their stock without other care or expense than protecting them by fences. The cereals and textiles sold from the farm carry from it the best fertile elements of the soil, to be returned to it only through the enriching grasses. And hence it is, that even in such countries as Great Britain, where a manufacturing population is so largely in excess of cereal production, and where the ocean yields its unnumbered fishes, the production of animal food gives a greater profit to the grazer than he receives who reaps the cereals from his fields.

But the *pleasures* of grass-growing and stock-grazing should not be passed by in comparing their value with that of cereal and textile production. These pleasures are enduring, and enduring pleasures are happiness, and happiness is the profit of our toil.

What country is more adorned than that which is covered with the grasses; the hill-sides clothed in their green vestment, and the more level meadows of mingled grass and flowers, giving promise of the abundant hay harvests, whilst the wooded crests rustle their leaves to the passing breezes, and protect the farm stock, with their deep shades, from the mid-day sultriness? And what man fitted for country life but finds one of his highest and purest pleasures when, of a Sabbath day, he walks among his stock grazing on sunny slopes covered with green carpets, and adorned with the flowers of May and the yellow dandelion? His cows, fragrant with the grasses they have eaten, repose beneath the shade of the trees, and his fleecy sheep gather around him, testifying their affection for him who provides these pastures and guards them from danger. Well indeed might the angels rejoice, as, contemplating the Almighty power, they beheld the

dark land clothed in living green, when the Creator commanded it to bring forth grass, the food of the nobler and more useful animals that were to follow.

"He maketh the grass to grow on the mountains," is the exclamation of the Psalmist, when seeking to speak of the greatness and goodness of the Lord. But it is, as seen on the prairie, either in the spring, rich in its changing green, and decked with wild flowers of every hue, or its tall, bending tops yielding to the autumn breeze, and seems to our vision as the waves of a limitless ocean, that its beauty and grandeur are best seen—its vastness fills and exalts the mind. But how beautiful still is it even when seen along the banks of the winding rivulet, where it is the first of nature's awakening life to welcome the returning year.

"Gather a single blade of grass," says Mr. Ruskin, "and examine for a minute, quietly, its narrow-shaped strip of fluted green; nothing, as it seems there, of notable goodness or beauty; a very little strength, and a very little tallness, and a few delicate long lines meeting in a point—not a perfect point, either, but blunt and unfinished, by no means a creditable or apparently much-cared-for example of nature's workmanship; made, as it seems, only to be trodden upon to-day, and to-morrow to be cast into the oven; and a little pale and hollow stalk, feeble and flaccid, leading down to the dull brown fibres of roots. And yet, think of it well, and judge whether of all the gorgeous flowers that beam in summer air, and of all strong and goodly trees, pleasant to the eyes and good for food, stately palm and pine, strong ash and oak, scented citron, burdened vine, there be any by man so deeply loved, by God so highly graced, as that narrow point of feeble green. The fields! Follow forth but for a little time the thoughts of all that we ought to recognize in those words! All spring and summer is in them, the walks by silent, scented paths, the rests in noonday heat, the joy of herds and flocks, the life of sunlight upon the world, pastures beside the pacing brooks, soft banks and knolls of lowly hills, crisp lawns all dim with early dew or smooth in evening warmth of barred sunshine, these are summed in those simple words—*the fields.*"

The number and kinds of grasses.—There are about four thousand distinct species, but these include the cereals and sugar-producing plants. In England there are 133 species of those commonly called grasses, which there as here differ in many things—in time of maturity, hardiness, nutrition; one best adapted for a certain season, and another for a season unlike it; one for a clay soil, another for a sandy loam; one, like the blue-grass, taking hold slowly from its weak, early growth, but enduring for many years; another, as the red clover, growing rapidly from its germination, but brief in its existence.

Of the many kinds in this country, there are few generally cultivated, and, in this article, those which will be noticed are the Kentucky blue-grass, the orchard grass, the red clover, timothy, and redtop. The first two are used for pastures, the third for pastures and meadow, and the fourth and fifth for meadows, but all may be grown in the same pasture.

What we desire to say on these grasses will be embraced under these heads: a brief description of them; what relates to the making of woodland pastures, and their management; the best modes of making meadows, and their management.

A BRIEF DESCRIPTION OF THE ABOVE-MENTIONED GRASSES.

1. The *Kentucky blue-grass* is the principal grass for permanent pastures. It is known by other names, as June grass, from the time of its ripening its seed; green grass, from its color in the northern and middle States and Virginia; but in Kentucky and the western States, where the climate and the soil of many parts of those States are very favorable to its growth, it is known by the name we have given it. Here it acquires, from the vigor of its growth, a blue tinge

of color. From its tenacity of life, and from its general use, it will be found to occupy all waste fields in a few years. Although it is the weakest of all the grasses in the first year of its growth, yet it roots out all other grasses, it forms the thickest of all sods, and will continue to produce bountiful annual pastures for at least fifty years, and perhaps indefinitely.

In some parts of the United States there is a grass coarser than this cultivated, called the English blue-grass; it is an English variety, as its name indicates, but, like the most of the grasses of that country, it is ill adapted to such a dry climate as ours. When beginning its growth from the seed, it is easily killed by the July drought, and it never spreads into a continuous and heavy sod, such as is formed by the Kentucky blue-grass. It seems to be intermediate between this grass and the orchard grass. It endures the cold of winter, remaining greener than the Kentucky blue-grass, and may be advantageously mixed with it, because, growing in strong tufts, it upholds the long, slender blades of the Kentucky variety.

2. *The orchard grass.*—In England this grass is called the cocksfoot, from the resemblance of its seed-head to the foot of that fowl. As it is a grass not properly appreciated in this country, we will dwell longer on its description than on any other.

The following notice of it, written in July last, for the Highland Agricultural Society of Scotland, contains a description of its qualities, as applicable to it in this country as in Great Britain:

"Cocksfoot is probably the best known and most productive of our indigenous grasses. It grows naturally to a height of from 2 to 2½ feet, and produces an immense quantity of nutritious leaves and foliage. Its only fault is, that its habit of growth is tufty, which gives a somewhat unsightly appearance to pasture land. It is not, however, so liable to get tufty when combined with other grasses; more so when grown for hay by itself. Cocksfoot soon arrives at its full productive powers from the time of sowing, and yields an extremely large bulk of hay, reproducing its herbage also very rapidly after being cut. It is well adapted to sow, either for hay or grazing, in any course of rotation whatever. When kept low by grazing, it is a most valuable grass in pasture for the first four or five years, as after that time it seems to die out if constantly depastured by cattle, more so if by sheep, and gives place to the smaller, finer-leaved sorts.

"The cocksfoot lives and thrives best on a medium loamy soil, giving a rather meagre return when grown upon very stiff clays or light sands. It is exceedingly luxuriant when growing in deep, moist soils, under the shade of trees. When grown upon a fertile loam, with a free, porous subsoil, into which its fibrous roots can penetrate to some depth, it then becomes productive in an extraordinary degree; but if grown upon a thin surface soil, with a stiffish subsoil, the produce is much less, and the plants are also liable to be drawn out of the ground by the cattle when grazing, owing to the slender hold which the roots can take. The cocksfoot grass is found to compose, in large proportion, the herbage of some of the most famed pastures in Devonshire, Lincolnshire, &c. It yields a weight of hay much greater than that of rye-grass, and its hay is also much superior in nourishing properties, and contains most nutritive matter when the seeds are ripe."

The blue grasses have a spring and fall growth only; during the summer their yield is but small. Timothy is slow in its growth after it is mown, but the orchard grass grows rapidly during all seasons. It is the earliest grass we have, and it remains green during the winter. Its strong tufts uphold the snow, and hence it is well suited for winter grazing, by sheep, in deep snows.

Mr. Sanders, of Kentucky, was one of the best farmers of that State, and he bears this testimony of the excellent qualities of this grass:

"My observation and experience have induced me to rely mainly on orchard grass and clover; indeed I now sow no other sort of grass-seed. These grasses mixed make the best of hay of all the grasses of this climate; it is nutritious and well adapted as food for stock. Orchard grass is ready for grazing in the spring ten or twelve days sooner than any other that affords a full bite. When grazed down, and stock turned off, it will be ready for regrazing in less than half the time required for Kentucky blue-grass. It stands a severe drought better than any other grass, keeping green and growing when other sorts are dried up. In summer it will grow more in a day than blue-grass will in a week."

3. *Timothy.*—Nearly all the hay which enters into the commerce of this country is made from this grass. It has greater weight and more nutriment in the same bulk than any other kind. Its great yield, its adaptation to lands too moist or wet for grain crops, the time of its maturing being after the grain harvests, and the continued growth of nutritive elements in the blades and stalks during and after the flowering and the ripening of the seed, make it the best of our grasses for hay. Cut at that time, when it retains the ripened seed, it unites more than any other grass the nutrition of the seed with an undiminished value of the stalk and leaves. The change it undergoes is very gradual, and hence delays from the demands of other work, or unfavorable weather, are not usually injurious. Its defects are, that it does not start early in the spring; that the aftermath grows slowly, although it is very nutritious, and that when fed alone as hay it is binding from its heating qualities. For the farm stock it is best to feed it with other less heating foddering substances, as corn fodder or clover hay.

This grass is indigenous to Great Britain, where it is called catstail, from the resemblance of the panicle to a cat's tail. But in this country it has derived its name from Timothy Hanson, who was the first to bring it into public notice.

4. *Red clover.*—Although this plant belongs to the leguminous family, yet in common use the word grass embraces clover, and from this fact, and its use as a grass, for hay and pasturage, it is here noticed as a grass. It occupies a higher position than any other grass in the economy of the farm, for its hay is unequalled for farm uses; its second crop yields a seed of great commercial value; as a pasture, from the beginning of May to the 1st of September it is superior to any other; and, as a fertilizer for the soil, by ploughing a full clover crop under, it has no equal in any other plant. To its heavy and enriching top it adds a corresponding root, which penetrates deeply, adding to the depth as well as to the fertility of the soil. As a pasture, it is better adapted, during the summer season, to fattening purposes than any other grass for all farm stock, but especially for cattle, hogs, and sheep. Its adaptedness to fine summer butter-making has rendered the butter of New York so superior; and its suitableness for hogs has assisted much to swell the pork product of the west to its greatness.

The red clover is of two kinds—the *small*, blooming twice in the season, the second of which is seed-producing, and the *large*, which blooms but once. The latter is not yet generally known, being limited to a few localities. It is far more productive than the small, grows comparatively better on poor soil, but its hay is coarse. The time of its ripening the seed renders it well adapted to mixing with timothy, which by its strong growth assists in holding up the clover, for it falls on the ground when raised by itself alone.

The objections to clover are, that having a root with a crown it is forced upwards by the expansion of the soil in winter freezing, and is often frozen out. To a considerable extent this may be helped by rolling in the spring. It is a biennial plant, and not perennial, and hence requires to be resown often. But it readily seeds itself when not pastured too closely in the fall, and meadows of mixed clover and timothy will endure many years without breaking up.

5. *Redtop.*—In low, moist, or wet situations the redtop is an excellent meadow grass, for it is finer than timothy, but in dry grounds it is almost worthless. It is a pest to dry pastures, rooting out nearly all other grasses, yet producing a very light yield As a meadow grass it has a most excellent quality in its late ripening, and in its remaining long uninjured after maturing its seed. To the farmer, therefore, who has much meadow land, and a limited amount of labor, it is valuable because of these qualities.

Grasses are used for grazing and hay, and the grass fields are divided into pastures and meadows. These purposes demand different grasses, and different preparation and treatment, and hence should be considered separately.

Pastures are of two kinds, *woodland* and *field.*

1. *Woodland pastures.*—Commerce and manufactures avoid an investment of unproductive capital; but agriculture, looking to future wants and the gradual advance of price in real estate, has made an investment in woodlands, as great as it is uselessly unproductive. The following table, taken from the census returns of 1860, exhibits the number of improved and unimproved acres in the loyal States:

States.	Improved.	Unimproved.	Cash value of farms.
Maine	2,704,133	3,023,538	$78,688,525
New Hampshire	2,367,034	1,377,591	69,689,761
Vermont	2,823,157	1,451,257	94,289,045
Massachusetts	2,155,512	1,183,212	123,255,948
Rhode Island	335,128	186,096	19,550,553
Connecticut	1,830,807	673,457	90,830,005
New York	14,358,403	6,616,555	803,343,593
New Jersey	1,944,441	1,039,084	180,250,338
Pennsylvania	10,465,296	6,548,844	662,050,707
Maryland	3,002,267	1,833,304	145,973,677
Delaware	637,065	367,230	31,426,357
Kentucky	7,644,208	11,519,053	291,496,955
Ohio	12,625,394	7,846,747	678,132,991
Michigan	3,476,296	3,554,538	160,836,495
Indiana	8,242,183	8,146,109	356,712,175
Illinois	13,096,374	7,815,615	408,944,033
Missouri	6,246,871	13,737,939	230,632,126
Wisconsin	3,746,167	4,147,420	131,117,164
Iowa	3,792,792	6,277,115	119,899,547
Minnesota	556,250	2,155,718	27,505,922
Kansas	405,468	1,372,932	12,258,239
Nebraska Territory	118,789	512,425	3,878,326
Total	102,574,035	91,385,779	4,720,762,482

But few of these unimproved acres yield anything else to the owners than firewood and the rails used on the farms. The farmer's reply to the question why he has an investment so unproductive will be, that he keeps these woodlands "for the timber." But in nine acres of ten, nearly all the trees are unfit

for any other purpose than firewood, and the advance in the price of firewood is too small to justify their preservation, except in a few localities. This dead investment should be made a living one; and keeping in view the preservation of the valuable timber, no better mode could be adopted than the conversion of the woodlands to woodland pastures. For this purpose the first step is to deaden the useless timber—a work, in clay soils, demanding much more care than it is supposed to require; for the danger lies in the undergrowth taking possession of the ground as fast as the larger trees die, and ultimately destroying the pastures. In most of woodlands there is an undergrowth of small trees, as the dog-wood and red-bud. The ground is seeded with them, and from the unseen sprout to the usual-sized sapling the soil teems with an inanimate life, ready to become vigorous as soon as the sunlight calls it into active existence.

The first step is to kill all this undergrowth whilst the shade of the larger trees prevents sprouting. Hence the saplings should be deadened first, at least two years before the larger timber. It does not matter at what season this is done, but it is best to simply deaden them, and not cut them down, as the tendency to throw off shoots below the girdle is not so strong as when a large portion of the sap passes to the top of the sapling. If sheep or cattle can be kept on the woodland after this deadening, it is much more certain that the sprouts will be destroyed. After they have been killed, the larger and worthless timber should be deadened, and May is the best month for this purpose. The sap is in its fullest flow; but its downward course to the root being cut off, the root is exhausted so much as to be unable to live. In some kinds, as the beech, whose sap-wood is very thick, the exhaustion is not so great, but death ensues the following season.

The extent of the destruction of the large timber must be determined by the amount of valuable trees, and the wants of the farmer for pastures. The orchard grass will grow in the shade; so will the blue-grass, but not so freely; still it is well known that the nutritious qualities of grass grown in the shade are much less than when grown in sunlight. Kentucky farmers leave scarcely a tree on their celebrated blue-grass pastures. The farmer must determine the relative advantages to him of timber trees and nutritious grasses, but as a general remark it may be said that few trees fit for nothing else but firewood should be left standing. If these are destroyed, the woodland will be sufficiently open to produce profitable pastures.

In the fall after the trees have been deadened, and when their leaves have fallen, they should be raked in winrows and burned. The old logs and the fallen saplings will usually be burned with the leaves. The grounds will then be ready to receive the seed, which may be sown at any time during the winter. When snow is on the ground is the best time, as the tracks of the sower serve as a guide by which to measure and keep the width of the land sowed each round.

The kind and quantities of seed to be sown.—Pastures should be formed of different varieties of grasses, for two reasons. The *first* one is, that no single kind possesses all the requisites needed. Thus it is desirable that the soil should be occupied *at once* by the grasses, that weeds and bushes may be prevented from growing. Blue-grass is scarcely seen for two years after the seed is sown, so weak and slow is its first growth. But orchard and timothy grasses grow rapidly, but give way to the blue-grass as it attains size. They will afford pasture much sooner than the blue-grass. It is also desirable that the defects in the growth of one grass should be counterbalanced by excellencies in another. Blue-grass, as already stated, does not grow much during the summer months, but the orchard grass does. It has an earlier start than either the timothy or blue-grass. In pastures the sod formed by the grass should be thick and elastic. These qualities the blue-grass has, whilst the sod of the other two

is inclined to be tufty, and thin, and unelastic. A union of these respective excellences is much to be desired, and hence these grasses should be mixed.

A *second* reason for having mixed grasses is in the fact that the same plant does not thrive well a long time without the condition of the soil is changed. Thus clover and rank-growing weeds, as the rag-weed, and trees, cannot do as well when succeeding the same as another plant. Whether it is because each plant leaves an excrement in the soil that is food to another plant, but a poison to itself, or whether there is exhausted a certain proportion of the elements of growth in the soil, essential to its most vigorous growth, are questions not yet fully determined. But in either case we see a reason for the fact that mixed grasses will yield a greater amount of food than if the ground is fully occupied by one kind only.

The *proportion* of seed sown to the acre is about three quarts of timothy and eight quarts each of stripped orchard and blue-grass seed. But precise *quantities* should not be regarded, for whilst preserving the proper *proportions*, no one should stint the amount of seed sown. Liberality is the best policy, as it is better to grow grasses than weeds.

Management of woodland pastures.—Two conflicting objects will present themselves the first and second seasons after the grass seed has been sown. Sprouts, bushes, briers, and weeds will soon manifest their presence, especially in clay soils, and the farmer will desire that these should be eaten down at once. But it will be too soon to put on stock, especially cattle, whose trampling would injure the young grass. In this, as in so many other cases, the farmer must be governed by the peculiar exigencies of the case. If the bushes and briers do not show themselves in too great numbers, it will be best to withhold the stock until the timothy has seeded; but if they do, then light stock, as sheep, should be turned on, for there is no more provoking pest than to have the woodland pastures occupied by undergrowth. If among these the sumac is found, there is but one course to take—extirpate it with the grubbing hoe, for no animals will touch it, and, once it gets a hold, its tenacity of life is an unending source of discomfort. See that not a bud is left on the hickory sprouts or saplings, for grubbing then is as ineffectual to their extirpation as the grubbing of sassafras, although they will not spread so much as the latter.

Supposing these pests are kept down, it is best in the second and third years not to pasture until the orchard grass has seeded. The growth of the grass will be much advanced by sowing on it two bushels of plaster of Paris to the acre. In the fourth year the blue-grass should be allowed to seed. After this the pasturing may be more general and constant, but frequently it will be well to allow a full spring and fall growth unpastured, reserving the grass for a winter pasture. This enables the sod to become better established by an increased growth of the roots.

As a general fact, pasturing is commenced too early. The grasses put forth an abundance of new roots every spring, and upon the vigor, size, and quantity of these the plant must rely to resist the effects of our summer droughts. These roots are dependent on the blades of the top, as the roots of trees are dependent on the leaves. If the blades are kept closely eaten off, and if the ground is trampled hard immediately after the winter frosts have left which have mellowed it, what growth of grass can be justly expected in summer? It is to this early pasturing that may be attributed the usual complaint of dried-up pastures.

2. *Field pastures.*—Woodland pastures are *permanent;* field pastures are *temporary* or *permanent.* The *temporary* are formed of clover alone, and the seed is usually sown on wheat, rye, or oats in the spring, and may be sown with great success on the stubble the spring after they have been cut. The stubble, with the dried grass and weeds, usually fox-tail and rag-weed, affords a most excellent protection against the summer drought. When sown in this way, it

should be done when the last snow or freeze is on the ground. No harrowing is necessary. In sowing clover seed on oat fields, when the ground has been freshly ploughed, the loose soil often becomes so dry from drought that the sprouted seed perishes. Clover in the chaff is best in such sowing, for it protects the moisture of the sprouting seed; and it should be sown immediately after the oats have been sown, and before any rain has fallen, that the first rain on the loose soil may bury the seed as deeply as possible.

In making these pastures, a question is often asked in the western States, whether oats or rye, sown in clover, can be *hogged down*, or pastured with hogs, without injury to the clover. Experience shows that no injury results to it, and hence a most excellent method to return corn-fields speedily and with profit to clover is to sow rye in the corn in September, and in the following spring to sow clover seed upon it, hogging down the rye in July or August. No food for hogs can be so cheaply raised; the rye straw enriches the ground and protects the clover.

It is usual for farmers to pasture clover pastures in the fall after they have been sown. This is wrong, for the plant should have all its strength to form a strong root, and not to recuperate its tops from the pasturing. The trampling of the ground retards the growth of the clover, so that whatever is gained by this early pasturing is more than lost in the decreased product of the following season. The proper time to commence to pasture is not until the second season, when the clover is in full bloom.

Permanent field pastures are made by sowing the seed in like manner as stated for temporary pastures, but they should be formed of mixed grasses. These may be of the four named—clover, timothy, orchard, and blue-grass. If the pastures are intended for less than five years' duration, the last one should not be sown, as blue-grass does not yield profitable grazing before it is four or five years old. The clover is not so liable to freeze out when sown with these grasses, for their sod protects the ground from that degree of expansion by freezing which so often is found to destroy the clover root when grown by itself in temporary pastures.

The *quantity* of clover seed sown is usually about one bushel to eight acres, often to ten acres, but this is too thin, and allows the weeds to obtain a hold, particularly the rag-weed, which in the fall so injuriously affects the flavor of butter and cheese. Few farmers sow enough grass-seed, depending upon the expectation that the field will subsequently seed itself. But in the mean time weeds secure a hold, and close pasturing prevents the seeding on which they depended.

Meadows.—The second general division of grass fields is the meadow. These are of several kinds, according to the kinds of grasses of which they are composed, as timothy meadow, clover meadow, or of mixed grasses.

In selecting the ground for the meadow there are several matters to be considered. The use of the mowing-machine and of the horse-rake so much facilitates the labor of harvesting, that level or rolling ground should be preferred to hill-sides, and it should be free from the obstructions of stumps. On the other hand, new ground, from its productiveness, is to be preferred; but the mowers and horse-rakes cannot be used upon it when covered with stumps. The new ground, because of these obstructions, should not be preferred, except only when, because of its moisture and superior richness, it will justify the use of the scythe and pitchfork by the greatness of its yield. The meadow should be near to the barn when the hay is to be consumed on the farm; for if not, there is a great temptation to allow the stock to run to the stacks, a most wasteful manner of feeding. The practice may be tolerated on the prairies, and when stacks and ricks are the only protection for cattle; but ordinarily it cannot be too much condemned. The saving in food and manure, and the better condition

of the stock, demands that the feeding should be under shelter—in sheds, with a common rack in the centre, or, what is better, in separate stalls. Where there is not room enough in the barn for all the hay, it should be stacked in the barn-yard, or adjoining it; and as stacking can be most expeditiously and cheaply performed by hauling the haycocks to the stacking place with a horse and rope, the meadow should be, if possible, adjoining the barn-yard. Another advantage from such location would be in the ease with which it could be manured. The farmer would then be more likely to properly treat his meadow, and not, as is too often the case, crop it to exhaustion.

In determining the kind of grass he will sow, the quality and character of the soil must govern him. A dry locality and a soil of medium fertility should be put in clover, and enriched as speedily as possible, which can best be done by sowing plaster of Paris upon it when the grass is three or four inches high. Unleached ashes and barn-yard manure are excellent. A full crop, after it has seeded, should be turned under. When the soil is by these means made sufficiently rich, if a permanent meadow is desired, clover and timothy should be sown together. In this mixture the large clover is to be preferred, for it produces its seed by the first bloom, and ripens it when the timothy does. If the clover is the smaller and earlier kind, orchard grass would be a more preferable mixture.

If the soil is a moist, level, and rich clay, timothy is the best grass for it. If the clay is too compact, like the crawfish soils, it should be drained. If this cannot or *will not* be done, then it should be deepened gradually so as to loosen it permanently, and to render it warmer and richer and drier. For this purpose any green crop it can produce should be turned under, with other manures that can be given to it. Every turning under should be two inches deeper. When it can produce good clover, and has been ploughed to the depth of eight inches, it may be permanently sown in timothy alone. Where the hay is not to be used on the farm, but sold, especially when put up in bales, the grass should be pure timothy.

Mixed meadow grasses should be, as already said, the large clover and timothy, or the small clover and orchard grass. A mixed grass is best when the hay is to be consumed on the farm, or near by. For the reason already stated, that pure timothy is too heating, resulting in binding, so that the skin of the stock loses its mellowness and elasticity, the hair assumes a dead appearance, and is infested with lice towards spring. If the farmer feeds corn fodder or clover hay, then he may properly feed pure timothy, if he feeds these alternately in the evening and morning.

The advantages of a mixture of clover and orchard grass will be often very decided. When describing the latter grass it was stated that its aftermath grew rapidly, and started quickly after the meadow was mown; so does clover. The two will grow a second crop, which, in dry falls, when the common pastures become exhausted, will postpone the commencement of winter feeding, and send the stock to their winter quarters in excellent condition.

A very wet piece of ground, especially if made so by springs, may advantageously be sown in redtop. In such situations it grows a heavy crop.

WEIGHTS AND MEASURES.

Our excellent correspondent at St. Louis, Mr. John A. Tice, forwards to the department the following communication on the subject of weights and measures. Mr. Tice says: "Knowing that the writer had thought more on that subject and investigated it more thoroughly than any other man in the Union, I handed him your bi-monthly report for December, 1864. If the subject ever comes up

for legislative action, it is well to have all the mature thoughts of men who have studied it for years, and traced out all its bearings."

The Congress which has just closed its existence has taken no other action on the subject of weights and measures than the appointment of a standing committee upon it. But legislative action will be had, and the statement given in the communication of the efforts made by persons in New York to devise a plan for the extension of the decimal system to weights and measures, but admonishes us to an unceasing effort for congressional action. The evils arising for want of such an extension of the plan embodied in our coinage will grow greater and greater, until they become, as they now are in Great Britain, so great as to be beyond legislative control.

We have not seen the report referred to in the communication, but will procure it. How far the "American plan" it suggests can be made acceptable to the commercial nations, so as to become, ultimately, an *international plan*, will be carefully considered; for what is now most desired is an international system, and not an American one, however much the latter may be preferred to the present conflicting action of the several States.

ST. LOUIS, *March* 6, 1865.

SIR: In your bi-monthly report for November and December of last year I observed a communication, signed R. E. Johnson, on the "Decimal System of Weights and Measures." The writer of this article seems not to be aware that this important subject was extensively canvassed some years since by a number of its advocates in the city of New York. These gentlemen formed a joint committee, comprising members of the Chamber of Commerce of New York and the New York Geographical and Statistical Societies, appointed for the purpose of examining a particular "Plan for the Extension of the Decimal System to the Weights and Measures of the United States." During this investigation the chairman of the committee visited London and Paris, where he had the advantage of prosecuting his inquiries more extensively. Soon after his return the committee reported *in extenso* in favor of the plan under consideration. Their report was received and approved by the above bodies, and by them printed and published.

The more prominent features of this, which we call the AMERICAN PLAN, are, *its harmonious combination of weight, measure, and money, its extreme simplicity, and the facility with which it may be applied to the existing practice of our national commerce.* "It may also be observed that, being devoid of all novel words and phrases, the language will not be debased by whimsical additions or barbarous corruptions; it disturbs no existing regulations; it demands no inconvenient concessions; it introduces no ridiculous innovations; it interferes with no legal nor commercial forms; nor does it antagonize those plain practical interests which the great body of the people instinctively appreciate." These advantages have been frankly conceded.

After a cursory examination of the metrical system which cost France forty-five years to establish, the committee conclude their able report in the following manner:

"Since the deficiencies of the French system will forever prevent it from becoming universal, it has been observed by competent authorities that, in the event of the plan we advocate being adopted here, Great Britain will be compelled to follow in our steps as soon as she has secured a decimal currency, if it be only from inability to take any other course with equal advantage. Grant the probability of such a sequence, and the fact of two great powers conducting their commerce on the same principle will exert a potential influence on other nations, which, in course of time, may result in our American plan becoming universal.

"Your committee are of opinion that no sound reason can be advanced against

the adoption of this plan, every part and particle of which has been considered and reconsidered, and the whole so thoroughly winnowed by the fan of controversy, that nothing but the golden grain is now remaining. From the first day of its actual introduction each individual of our thirty millions, as well as all posterity, will participate in the benefits and conveniences it will surely confer.

"Every part of Europe is alive to this reformation. Societies have been formed in various countries for its establishment; and from the fact of our currency being formed on the decimal principle, all eyes are turned upon us, with the full expectation that we shall take the lead in this noble enterprise. Should we accomplish our design, we shall gain the respect of the present generation, and all posterity will exultingly refer to our elevated position on the scale of national intelligence; but, on the other hand, should we miss this opportunity, we shall lose in the world's estimation, and the money scale, now our pride, will serve as a humiliating proof of our intellectual inferiority to the age of our fathers.

"In short, we must reconcile ourselves either to lead or to follow, for the time is at hand when a stationary attitude will expose us, as a nation, to well-deserved censure. In the name of patriotism, we appeal to our fellow-citizens, and conjure them not to defer the employment of every constitutional means within the scope of their influence to effect this reform. It is an enterprise suited to the times, and one that is well calculated to advance the honor and dignity of this country, and maintain its character in its progress towards intellectual and commercial eminence; and let it be remembered that the benefits resulting from its establishment will endure throughout endless generations."

Such are the recorded sentiments of this committee, after a protracted examination of fourteen months. It may naturally be asked why I have not given the plan at once. This was my original intention, but, on reflection, I found I should not be doing justice to the subject were I to submit the proposed scales or tables without note or comment; while, on the other hand, the explanatory matter would require more space than I could fairly ask for a subject which, unfortunately, is uninteresting to the majority of readers.

The supporters of this enterprise should be well informed respecting its theory, in order to meet the numerous objections which will certainly be urged against it. So thought the above named committee; and with this view, they have caused a volume of some two hundred pages to be written, comprising a full account of this projected American plan and other matter bearing upon the subject. This production is dedicated to the "Congress of the United States." It is published by Wiley & Son, New York, under the title of "*The Decimal system: An argument for American consistency in the extension of the Decimal scale to Weights and Measures in harmony with the national currency.*"

I have thus endeavored to show to your correspondent and others what has been done in this country respecting the subject of his communication, which is more important and comprehensive than many even of its advocates imagine. I confidently hope to see the legislature take some decisive steps towards its introduction, as soon as our national troubles are over.

Yours, &c.,

ZERO.

I. Newton, Esq.,
Commissioner of Agriculture.

Table No. 1.—The questions of this table will explain its character. The circulars containing them were sent to the correspondents of the department, and the average numbers, in tenths, and prices, derived from their answers, are seen in this table.

Table No. 1.

Showing the amount, in tenths, of the Stock of the loyal States in January, 1865, *compared with the amount in January,* 1864, *and the prices of the same for the different ages.*

STATES.	HORSES.					MULES.				
	Average number of horses compared with that of January, 1864.	Average price per head of same under 1 year old.	Average price per head of same between 1 and 2 years old.	Average price per head of same between 2 and 3 years old.	Average price per head of same over 3 years old.	Average number of mules compared with that of January, 1864.	Average price per head of same under 1 year old.	Average price per head of same between 1 and 2 years old.	Average price per head of same between 2 and 3 years old.	Average price per head of same over 3 years old.
Maine	9¼	$34 72	$54 50	$80 22	$112 25	.....	.....	.....	.....	.....
New Hampshire	9	28 89	48 30	69 00	101 70	.....	.....	.....	.....	.....
Vermont	9⅓	34 33	56 33	77 33	111 11	.....	.....	.....	.....	.....
Massachusetts	9 3/10	38 33	55 22	76 66	111 70	.....	.....	.....	.....	.....
Rhode Island	9⅔	33 33	58 00	88 33	111 67	.....	.....	.....	.....	.....
Connecticut	10	35 60	58 40	84 00	119 00	.....	.....	.....	.....	.....
New York	8 9/11	38 11	64 44	92 65	122 00	10 4/11	$44 11	$76 61	$111 77	$151 50
New Jersey	9½	49 58	80 83	115 41	142 29	10	48 54	78 73	115 64	152 77
Pennsylvania	9⅛	40 19	67 02	97 70	113 51	10⅛	47 22	81 00	125 35	158 37
Maryland	9	37 34	58 84	80 84	125 81	10	43 14	68 57	100 50	152 50
Delaware	8¼	35 00	54 00	77 00	120 50	9	.....	.....	.....	.....
Kentucky	7⅞	41 25	58 95	78 95	105 00	8	55 63	78 91	110 20	130 87
Ohio	8⅚	33 78	53 96	78 00	107 57	9	47 38	76 00	109 11	141 51
Michigan	10½	36 96	58 75	88 27	121 75	11½	45 41	72 72	106 36	147 79
Indiana	9 3/10	36 12	57 78	81 60	113 13	9½	47 26	76 00	105 00	138 16
Illinois	9⅘	38 43	60 00	87 65	117 39	10	51 70	67 73	113 00	148 00
Missouri	8	38 50	57 74	85 76	107 00	7⅞	52 73	72 00	112 00	145 36
Wisconsin	10½	36 14	54 77	84 44	115 86	11¼	53 42	79 00	112 25	148 73
Iowa	10⅜	41 28	61 65	90 93	121 87	10	53 47	79 06	112 65	153 00
Minnesota	12	41 47	66 52	89 94	120 00	11	53 62	76 87	117 50	158 00
Kansas	11⅙	33 00	53 61	85 00	115 83	11	51 93	77 93	114 11	161 75
West Virginia	8 4/10	37 00	57 00	79 00	104 54	8 7/10	42 00	63 00	90 00	123 00
Nebraska Ter'ry	13½	39 54	64 54	92 72	120 91	13 3/10	60 28	88 43	136 00	167 22

TABLE No. 1—Continued.

STATES.	CATTLE AND OXEN.					MILCH COWS.			SHEEP.	
	Average number of cattle and oxen compared with that of January, 1864.	Average price per head of same under 1 year old.	Average price per head of same between 1 and 2 years old.	Average price per head of same between 2 and 3 years old.	Average price per head of same over 3 years old.	Average number of milch cows compared with that of January, 1864.	Average price per head of cows at this time.	Average number of sheep compared with that of January, 1864.	Average price per head of same under 1 year old.	Average price per head of same over 1 year old.
Maine	8 1/10	$12 11	$23 94	$37 27	$68 19	9	$43 70	11	$4 57	$5 89
New Hampshire	8	11 10	20 40	34 00	67 00	8 1/3	39 30	11 6/10	4 22	5 85
Vermont	8	9 78	21 44	39 33	70 00	9 2/3	43 11	11 1/4	4 44	6 50
Massachusetts	9	12 50	24 50	40 75	68 75	8	52 50	10 4/10	4 48	6 84
Rhode Island	10	12 33	22 67	38 33	63 33	10	46 67	10	5 00	6 83
Connecticut	9 1/9	10 00	20 40	38 00	68 00	10	40 60	10	4 00	6 70
New York	8 3/4	11 58	21 41	35 83	62 00	10	44 31	10 1/2	4 26	5 93
New Jersey	8 3/4	14 45	23 08	35 21	63 58	9 1/2	48 00	9	4 64	6 77
Pennsylvania	9	11 42	19 71	31 48	49 24	9 1/3	39 22	11	4 07	6 15
Maryland	8 5/10	9 92	16 54	26 61	42 30	9 3/10	38 00	11 2/3	4 95	7 71
Delaware	7 3/4	10 50	20 00	35 00	48 00	8 1/4	42 50	8 3/4	4 50	6 50
Kentucky	8 1/2	10 33	20 20	34 33	52 12	9	42 20	10 1/2	4 10	6 00
Ohio	8 5/6	9 44	17 41	28 87	45 71	8 5/6	35 13	12 1/3	3 96	6 00
Michigan	9	7 83	15 72	27 48	49 00	10	32 27	12 1/4	3 79	5 68
Indiana	8 1/3	7 89	15 10	25 14	38 68	9	32 07	12 7/10	3 53	5 11
Illinois	9 2/3	7 78	14 69	23 71	38 58	9 1/2	30 46	12 3/8	3 93	5 70
Missouri	7 3/8	6 22	12 36	21 60	35 70	9	20 61	10 3/4	2 51	4 19
Wisconsin	9	7 63	14 06	23 41	41 45	10 1/5	28 78	14	4 43	6 18
Iowa	10	7 91	14 72	25 17	41 82	10 2/3	26 68	14 1/2	4 19	6 00
Minnesota	10 4/10	8 94	14 70	21 79	40 19	11 1/2	26 35	15 1/2	3 98	5 64
Kansas	12 1/9	8 00	15 44	27 55	45 77	12 2/3	26 66	14	3 78	5 56
West Virginia	8 7/10	7 60	15 80	25 30	38 45	9	32 81	10 8/10	2 70	4 27
Nebraska Ter'ry	12 1/2	9 81	17 46	28 50	48 20	12 1/4	30 63	18 1/8	4 37	6 68

TABLE No. 1—Continued.

STATES.	HOGS.			WEATHER FOR JANUARY.					
	Average number of hogs compared with that of January, 1864.	Average price of same per head under 1 year old.	Average price of same per head over 1 year old.	Favorable.	Wet.	Very wet.	Dry.	Very dry.	Snow.
Maine	8 9/10	$14 21	$23 40	9	1	.....	.....	7	23
New Hampshire	7 7/10	15 50	30 00	19	.....	.....	.....	2	11
Vermont	8 4/9	15 00	28 33	14	.....	.....	.....	4	14
Massachusetts	8	14 85	31 43	21	7	.....	3	.....	9
Rhode Island	8 1/3	14 00	26 66	5	1	.....	.....	.....	2
Connecticut	7 4/5	14 00	27 50	10	1	.....	2	1	5
New York	8 1/2	11 90	20 82	42	2	.....	14	.....	105
New Jersey	8 1/3	12 58	23 00	12	10	1	10	.....	11
Pennsylvania	8 1/4	9 21	20 81	41	14	.....	19	1	97
Maryland	8 8/13	7 50	17 66	7	16	7	2	1	16
Delaware	8	10 50	27 50	.....	2	.....	1	.....	5
Kentucky	8 1/3	5 34	11 52	12	20	3	7	1	61
Ohio	7 3/3	6 94	16 24	35	10	1	15	.....	163
Michigan	8 1/2	5 26	13 23	53	1	.....	4	.....	38
Indiana	7 6/10	5 44	12 03	43	9	.....	32	13	100
Illinois	8 4/10	6 85	14 18	68	10	.....	83	28	35
Missouri	7	3 40	8 61	43	2	2	56	14	19
Wisconsin	8 1/2	6 00	13 65	76	.....	.....	33	1	40
Iowa	9	5 68	12 00	71	2	.....	65	22	20
Minnesota	9 1/2	6 23	15 00	25	.....	.....	17	5	13
Kansas	7 3/16	3 63	10 16	20	2	.....	20	12	13
West Virginia	8	5 00	11 36	2	0	4	1	.....	21
Nebraska Territory	9 1/2	5 18	12 20	14	3	.....	4	12	5
				642	119	18	388	124	826

Table No. 2.

In this table will be found the *numbers* of the stock, estimated from the returns in *tenths* of the preceding table, and the comparison of the amount of the stock for the years 1860, 1864, and 1865. The amount for the year 1860 is derived from the Abridged Census report, and no estimates for 1861, 1862, and 1863 were ever made by the department. In the next report will be published the value of this stock for each State, and the aggregate value of all, in a manner similar to that published in the February report, of the different crops. This table is a most instructive one, and our comments upon it will be found at the end of it.

Table No. 2.

Showing the comparative amount of the farm stock for the years 1860, 1864, *and* 1865.

States.	HORSES.			MULES.		
	1860.	1864.	1865.	1860.	1864.	1865.
Maine	60,638	56,375	52,147	104	124	124
New Hampshire	41,101	38,226	34,404	10	10	10
Vermont	67,250	54,790	49,920	35	35	35
Massachusetts	47,786	52,160	48,509	108	119	119
Rhode Island	7,121	7,306	7,063	10	12	12
Connecticut	33,276	34,554	34,554	82	88	88
New York	503,725	463,545	408,763	1,553	1,671	1,732
New Jersey	79,707	82,857	78,715	6,362	6,816	6,816
Pennsylvania	437,654	409,594	382,288	8,832	10,146	10,486
Maryland	93,406	87,355	78,620	9,829	9,599	9,599
Delaware	16,562	17,104	14,112	2,294	2,500	2,250
Kentucky	355,704	272,785	209,136	117,635	89,627	71,702
Ohio	622,829	589,242	520,497	6,917	8,376	7,539
Michigan	154,168	155,970	163,768	359	539	618
Indiana	409,504	385,690	358,692	18,627	20,563	19,535
Illinois	575,161	575,162	550,513	38,881	49,257	49,257
Missouri	361,874	272,429	217,943	80,941	64,056	49,645
Wisconsin	116,192	146,733	154,067	1,019	1,536	1,727
Iowa	174,957	288,678	307,923	5,713	12,206	12,206
Minnesota	17,122	26,486	31,782	395	659	659
Kansas	18,882	24,923	27,830	1,430	2,059	2,264
Nebraska Territory	4,522	7,178	9,687	473	850	1,130
Total	4,199,141	4,049,142	3,740,933	301,609	280,848	247,553

Table No. 2, showing the comparative amount of stock, &c.—Continued.

States.	CATTLE AND OXEN.			COWS.		
	1860.	1864.	1865.	1860.	1864.	1865.
Maine	229,619	211,227	172,823	147,315	150,065	135,059
New Hampshire	169,587	151,901	121,521	94,880	87,500	77,000
Vermont	192,219	190,119	152,095	171,698	167,954	162,356
Massachusetts	135,422	136,526	122,874	144,492	167,651	134,121
Rhode Island	19,405	20,553	20,553	19,700	21,290	21,290
Connecticut	143,028	146,190	133,195	98,877	109,714	109,714
New York	849,539	830,184	726,412	1,123,634	1,220,200	1,220,200
New Jersey	99,976	101,466	88,784	138,818	142,834	135,693
Pennsylvania	745,946	770,390	693,351	673,547	702,211	655,397
Maryland	153,778	145,986	128,469	99,463	101,983	94,845
Delaware	35,126	35,358	27,403	22,595	23,289	19,215
Kentucky	566,844	425,443	361,627	269,215	191,495	172,346
Ohio	963,541	864,206	748,979	696,309	690,337	609,799
Michigan	333,632	365,445	328,901	200,635	220,825	220,825
Indiana	678,972	655,870	546,558	491,033	505,711	455,140
Illinois	972,850	1,043,946	978,700	532,731	580,343	551,327
Missouri	823,741	614,355	471,006	345,243	303,020	272,718
Wisconsin	318,870	431,955	388,760	193,996	266,311	270,749
Iowa	347,708	561,338	561,338	188,546	282,819	294,131
Minnesota	78,622	122,284	127,175	40,386	68,495	78,768
Kansas	61,133	97,812	118,461	26,726	49,089	59,998
Nebraska Territory	21,590	42,885	53,606	7,125	13,162	17,439
Total	7,941,148	7,965,439	7,072,573	5,726,964	6,066,298	5,768,130

Table No. 2, showing the comparative amount of stock, &c.—Continued.

States.	SHEEP.			HOGS.		
	1860.	1864.	1865.	1860.	1864.	1865.
Maine	452,472	823,498	905,847	54,783	46,610	38,221
New Hampshire	310,534	565,271	655,714	51,935	42,584	32,790
Vermont	721,993	1,112,969	1,252,089	49,433	38,421	32,445
Massachusetts	114,829	194,190	201,957	73,948	63,263	50,611
Rhode Island	32,624	32,624	32,624	17,478	14,512	12,094
Connecticut	117,107	179,343	179,343	75,120	67,122	52,356
New York	2,617,855	4,237,324	4,576,310	910,178	823,508	699,983
New Jersey	135,228	194,728	175,256	236,089	219,759	183,459
Pennsylvania	1,631,540	2,610,458	2,871,503	1,031,266	976,150	829,728
Maryland	155,765	224,202	250,072	387,756	381,788	328,927
Delaware	18,857	20,000	17,500	47,848	40,248	32,199
Kentucky	938,990	774,667	813,400	2,330,595	1,922,740	1,602,284
Ohio	3,063,887	4,779,662	5,795,340	2,175,623	2,320,664	1,779,176
Michigan	1,464,477	2,465,360	3,020,066	374,664	399,642	339,696
Indiana	991,175	1,933,790	2,455,913	2,498,528	2,665,096	2,025,474
Illinois	775,230	1,627,983	2,062,112	2,279,722	2,421,703	2,034,231
Missouri	937,445	753,084	809,565	2,354,425	1,412,653	988,857
Wisconsin	332,454	692,803	969,925	333,957	400,749	340,638
Iowa	258,228	1,032,912	1,466,734	921,161	1,581,741	1,423,567
Minnesota	13,123	42,388	64,641	101,252	114,753	109,016
Kansas	15,702	43,204	60,486	128,309	160,386	102,246
Nebraska Territory	1,757	5,931	10,872	25,965	34,620	32,889
Total	15,104,272	24,346,391	28,647,269	17,060,035	16,148,712	13,070,562

COMMENTS ON THE PRECEDING TABLE.

This table will demand the serious consideration of the farmer. It shows a large and general decrease of the farm stock, except in sheep, which has increased largely. The high price of grain food and the scarcity of labor have led to less attention to stock-growing, but as sheep require less labor and less grain food, and the demand for wool has been constant at high prices, that stock seems to have taken to itself the chief care of the farmer. A year ago we called his attention to the decrease then, and urged the necessity of every effort to uphold the amount of farm stock. Whilst these causes were operating on the one hand, the heavy demands of the war hastened a decrease also on the other. The consequence is seen in the high prices to which all farm stock has attained. Of the increase in value we say nothing more now, as the tables of the April report will more fully exhibit them, when we can more understandingly dwell upon that subject.

Horses.—The total decrease during the last year is 308,209. There is a decrease in nearly all of the States, but a large portion of it is in the States of Kentucky and Missouri, where the presence of war and guerilla plunderings have caused a rapid diminution. The decrease in Kentucky is 63,649, and in Missouri 54,486, together 118,135, or more than one-third of the total decrease. The decrease in Ohio has been very great, for its central position has, directly and indirectly, created a heavy demand for its horses. Its decrease is 68,745, and in Indiana and Illinois the diminution is about 25,000 for each.

Mules.—The total decrease of mules is 33,295, which is found to be chiefly in the two States of Kentucky and Missouri. In the one it is 17,915, in the other 14,411, together 32,326.

Cattle.—There are 892,866 less of these than in January, 1864. There is a general decrease, Kansas and Nebraska Territory being the only places exhibiting an increase. The loss in Missouri has been heavy, being 143,349, in Kentucky 63,816, in Ohio 115,227, in Indiana 109,312. The decrease in Illinois is but 65,246, for this State, although furnishing more fatted cattle to the markets than any other, yet draws its supplies from Ohio and Indiana. Iowa has not decreased, from the fact, we presume, that large numbers of the cattle of Missouri were driven to it. The decrease in the middle and eastern States indicates the heavy demand for army consumption.

Cows.—These have been lessened 298,168, a matter of regret when the export demand for butter and cheese is so great, and the home demand for butter so much increased in consequence of the scarcity of lard. The export of cheese is largely increasing, whilst that of butter has increased slightly. The pounds of cheese exported from January 1, 1865, to March 7, are 7,850,155, and in the same time for 1864, 6,620,035. Of butter, 4,868,115 pounds in the same time in 1865, against 4,644,458 pounds in 1864. The effect of these exports has been to keep the number of cows the same in New York, but Ohio, Indiana, and Illinois have been drawn upon for this purpose. Wisconsin, Iowa, Minnesota, Kansas, and Nebraska Territory have increased their cows by drawing from Missouri.

Sheep.—The increase of sheep is 4,300,878, a most gratifying progress in wool and mutton production. As the number estimated is 28,647,269, and as it will be the number sheared in June, the amount of the next wool clip can be readily approximated to by simple calculation. The average yield of the loyal States, as indicated by the census reports in past years, has been about 3½ pounds per head, but the general increase of the larger breeds, the substitution of Spanish for the Saxon merinoes, and the greater care now bestowed upon the keeping of the flocks, have increased this average yield to at least 4 pounds. At this estimate the wool clip for 1865 will be 114,589,076 pounds.

Hogs.—The decrease in the number of these will arrest the attention of all

persons. It is 3,078,150. The decrease in January, 1864, as compared with the census returns of 1860, was 912,323. But the decrease was far greater if 1864 could be compared with 1863, for hogs had increased greatly in 1861, 1862, and the spring of 1863. The pork packed in 1863 was nearly double that of 1861. But their low price in 1862 and the loss of the corn crop in 1863 caused a rapid decrease, as shown above.

In our report for October, 1863, we predicted a decrease of the hogs that would be packed in the western States of Ohio, Michigan, Indiana, and Illinois, of 806,139, as well as a corresponding decrease in weight and lard. The end of the packing season showed a decrease in *all* of the western States of 1,002,658 hogs, a decrease of weight, per hog, of 26 pounds, being 12½ per cent., and the decrease in lard was 38 per cent.

In the bi-monthly report for September and October, with the returns of the number of hogs in the country in the previous January, we estimated a decrease in the number that would be packed in the western States of 950,636.

The returns of the last packing season are not all in, but the ascertained decrease on 2,955,881 of last season (1863–'64) is 787,173. The number packed and shipped last year, as far as known, was 3,389,427. A corresponding decrease of those not yet heard from will make the entire decrease in number 902,968. But as the places to be heard from usually pack but few, and as there was a greater falling off in these than in those houses where many are packed, the total decrease will not vary much from our estimated number, being 950,636. Since writing what precedes, we have received the Cincinnati Price Current of March 15, in which the decrease of the number packed in 1864, being 3,328,884, is given at 906,105. The number shipped to the eastern cities in 1864–'65, is not yet reported.

These estimates of the rapid decrease of the hogs in the packing seasons of 1863 and 1864, boldly made, tested the system of this department that it had formed to estimate the amounts of the crops; but the results, as shown above, justified the confidence placed in it by the department, and in the correctness of the information transmitted to it by its experienced correspondents.

In the returns and estimates as given in the foregoing tables we see how large is the decrease of hogs in January, 1865, compared with January, 1864. What will be the decrease of the number that will be packed in the season of 1865–'66 cannot now be determined, for much depends on the excellence of the clover pastures during the summer, and of the corn crops in the fall. In due time the estimate will be made, that farmers and packers may have a guide for the fall sales.

A TEST OF THE PLAN OF THE DEPARTMENT FOR ESTIMATING CROPS, ETC.

In connexion with what is given above, relative to the estimates made by the department of the stock and crops of the country, we give a comparison of the stock of Illinois, taken in the spring of 1863, with the estimated amount of it in January, 1864, by the department. The reader will see that the sales of the summer and fall should be deducted from the returns by Illinois, and that the importation of sheep into it during the same time, which were heavy, should be added. To the hogs should be added the fall litters, and the decreased number fattened on account of the failure of the corn crop should be borne in mind.

	Illinois returns.	Department estimates.
Horses, number	652,500	575,162
Mules, "	40,675	49,257
Cattle, "	1,684,892	1,624,289
Sheep, "	1,206,620	1,627,983
Hogs, "	2,506,183	2,421,703
Total	6,090,825	6,298,394

CALIFORNIA.

The secretary of the State Board of Agriculture for California writes the department from Sacramento, on the 20th of February, giving an encouraging account of the present condition of the crops: "The last year was one, he says, of extreme unfavorableness to all agricultural operations in this State. The present bids fair to be a good and successful one. There has been more grain sown than in any previous year, and, as a general thing, more pains has been taken in putting it in. The season, so far, has been very favorable for a good crop."

We ask the attention of California farmers to the following paragraph, and would urge them to a prompt and zealous co-operation with the secretary. He says:

"I am taking steps to secure the collection of reliable and full agricultural statistics for this year, and I hope to be able to transmit to you by November or December a very accurate estimate of the quantities of the different crops produced. In the mean time I will, as far as I am able, keep you posted as to their appearance and promise."

Speaking of the reports of this department, he remarks:

"I have received by mail 24 copies of your very excellent report for 1863. These reports are very much improved since the establishment of a separate agricultural department. They are annually becoming more interesting and useful to the agriculturist, and, indeed, are eagerly sought for by all classes of the community. I can distribute to a good advantage as many as you may send to me; also your bi-monthly reports. I have received and distributed the copies sent me during the past year. They are rapidly waking up an interest in the collection and distribution of agricultural statistics. I have not received any of them since the September and October number. I hope their publication has not been suspended, as I regard them of the highest importance, and likely to become even more so, when the rebellion shall be subdued, and the south shall again become accessible for obtaining information of the agriculture of that part of our country."

Before this, Mr. Hoag, the secretary, has doubtless received the bi-monthly report for November and December, and the monthly for January. He will see that, so far from suspending their publication, it has become monthly—a change required of the department by the absolute necessity of having constant communication with every part of this widespread and vast agriculture of our country. That necessity will be greatly increased when, once more, the whole of that agriculture shall dwell in fraternal harmony, each contributing to each, and when the Pacific railway shall bring the agriculture of the Pacific coast in daily intercourse with that of the Mississippi valley and of the Atlantic States.

UTAH.

Our correspondence shows that the energy and intelligence which so largely characterizes the farming of this Territory is still successfully operating. The following statement of our correspondent from Beaver, in Beaver county, gives an item of interest as showing how agriculture takes a hold in these Rocky Mountain districts, over which it is so rapidly advancing:

"You will be surprised to find no winter wheat sown in this county. A few words in explanation may not be uninteresting to you. First: We depend entirely on artificial irrigation for the maturing of our crops. This confines farming operations to the vicinity of water-courses, and limits the area susceptible of cultivation. Second: In this Indian country, the first consideration in forming a new settlement is, to get together a number of persons sufficient for protection. The settlement is then formed; the farming land surveyed into small lots, (generally five acres,) and drawn for. The entire survey is then fenced in common, each man building his pro rata of the common fence. The man who draws a number of lots by this lottery process finds them located in different parts of the survey, which adds greatly to the cost of fencing, should he wish to enclose his land to itself. Third: After the fall crops are gathered the gates are thrown open, and the stock range the field until the next spring. This renders it impossible to sow fall grain. It is but just, however, to observe that our farmers are waking up to the importance of private fencing, and it is to be hoped that soon we shall be in a situation to sow a liberal percentage of our grain in autumn."

WASHINGTON TERRITORY.

[It is not a purpose of these reports to present local matters, but when from our distant Territories we receive such a letter as that below, we publish it; for, though local, yet it is representative of a large section of country—one of the interior valleys of the Rocky Mountain ranges—and coming from a latitude so high, and yet with a climate so unlike our own, it cannot but be interesting to every farmer on the Atlantic slope. Eastward from Mount Hood, about as far from it as it is from the Pacific coast, and on the Lewis branch of the Columbia river, will be found the valley of Walla-Walla, and the town of the same name from which our correspondent writes.]

WASHINGTON TERRITORY,
Walla-Walla, January 14, 1865.

SIR: This town is located three miles north of the 46th parallel, about three hundred and twenty-five miles from the Pacific ocean, and in the heart of the Walla-Walla valley. This valley has been settled about four years, and the crops of the present season have been about an average, producing, in the valley, about 125,000 bushels of wheat, 175,000 bushels of oats, 40,000 to 50,000 of barley, 10,000 bushels of corn, a very large crop of vegetables, such as onions and potatoes, which do exceedingly well here. Melons and sweet potatoes grow very finely; I raised some of the latter that weighed 6½ pounds to the hill, and single potatoes that weighed 2¼ pounds. Peaches and grapes promise very finely; other fruits fair; and already there are apple orchards planted of from two thousand to six thousand trees. The farmers are determined to vie with their neighbors in the valleys west of the Cascade mountains in Oregon and Washington in producing fruits.

Idaho Territory has caught up the same spirit, and there have been sold the past season in Boise valley about twenty thousand fruit trees. This is a narrow valley lying on both sides of the Boise river, from its mouth to Boise City, a distance of forty-five miles, being about two hundred and fifty miles southeast of this place, and equidistant from it and Salt Lake City. It is a valley well suited for agriculture and raising fruits, and is nearly surrounded by the rich mining camps of Idaho.

But I return to this valley—that of Walla-Walla. The climate is delightful—not very hot in the summer, and generally very mild in the winter, but has severe and disagreeable winds in the spring and fall. Wheat is our staple, a

most extensive market being just at our doors in the Idaho mines. The kind of wheat mostly raised is the white winter; but on account of our open, mild winters, with little snow and considerable frost, and there being no seed-drills here yet, the farmers are beginning to sow the spring club wheat, which had been sent out from your office within the last few years. It was a most valuable acquisition for this valley, as it makes a flour scarcely inferior to that of the best white winter wheat, and averages about *thirty-nine* bushels per acre, while the other averages less than *twenty* bushels. One field, to my knowledge, with fair cultivation, averaged over *forty-four* bushels, and another field of about twenty acres, with good cultivation, averaged *fifty-six* bushels per acre. It can be sowed from the first of February to the first of April, which is a very great advantage on this coast, where the rains are liable to keep off until it is too late to put a crop in, in good order, in the fall. It brings the same price as the best winter wheat, ($1 50 per bushel here, and $1 in the Willamette valley,) gold rates.

The natural pastures are most excellent in this and Boise valleys—tens of thousands of acres unclaimed, covered with a most nutritious bunch-grass. Hay is made entirely from the low lands, and is not of very good quality, but still it sells from $20 to $200 per ton, according to locality. There were about 75,000 tons of hay used in Boise county this season, at about $100 per ton. The cultivated grasses do not succeed as well here as in Oregon, the soil being too light and porous.

There are no wild fruits of any consequence in this county excepting currants, some of which are really fine. In some places red, yellow, and black are found growing in one clump on bushes five feet high, the berries half an inch in diameter and of most excellent flavor. I dug up some plants on the Boise river, and brought them here to transplant; if I succeed with them I will forward some to your department. Please send some vegetable seeds.

Respectfully, yours,

PHILIP RITZ.

Hon. ISAAC NEWTON,
Commissioner of Agriculture.

IMPORTS OF FOREIGN WOOL.

It is not an easy matter to ascertain the amount and value of the imports into the United States, because there is no uniformity in times and manner of reporting them at the different ports of entry. The Treasury Department should be required to publish the imports and exports monthly, both their amount and value, and to do so should be invested with power to require all collectors to report to it.

From Hunt's Merchant's Magazine we take the following tables of the imports of foreign wool at New York and Boston, but estimate the *value* of those imported into Boston, taking the average price per bale at New York as a basis:

	New York		Boston.		
	Bales.	*Value.*	*Bales.*	*Value.*	*Total value.*
1860.....	30,985....	$2,250,928.....	30,160....	$2,191,124....	$4,442,052
1861.....	31,016....	2,006,136.....	31,578....	2,042,465....	4,048,601
1862.....	88,883....	6,134,292.....	39,799....	2,746,131....	8,880,423
1863.....	109,141....	8,121,032.....	22,644....	1,684,940....	9,805,972
1864.....	115,799....	9,418,291.....	35,341....	2,874,283....	12,292,574

These values are *gold*, as fixed at the ports from which the wool was imported, and to be represented in our *currency*. That its value may be compared with the value of domestic wool, it should be at least doubled, making the value of this foreign wool imported in 1864, $24,585,148.

FOREIGN PRICES OF WHEAT, ETC.

The Mark Lane Express, London, in commenting on the dull condition of the English markets for wheat, says, in its issue of February 20, "that no decided advance in the English markets can yet be quoted;" that in France there are great complaints on the part of the farmers, as well as in Germany; that Holland and Belgium show no change; in Hamburg, Switzerland, Hungary, and Bavaria there is some improvement; and that in Odessa, fine heavy qualities are firm, in spite of the general discouragement.

Whilst the European and English markets continue in this dull state, it is needless to make quotations of their prices. By referring to our table of exports of leading agricultural products from New York, it will be seen that there is a large decrease of our exports since January 1, 1865, compared with the same time last year. Butter and cheese, and tobacco, are in active demand, and their exports are increasing, but in nearly all else a material decrease, admonishing all to the greatest economy in their purchases of foreign goods.

EXPORTS AND PRICES OF PRODUCE.

Table of the exports from New York of the leading agricultural products, from January 1 to March 14, 1865, compared with those in the same time in 1864, and their prices in New York and Chicago.

Articles.	Jan. 1 to Mar. 14, 1865.	Jan. 1 to Mar. 14, 1864.	Prices in N. York Mar. 14, 1865.	Prices in Chicago Mar. 15, 1865.
Wheat flour ..... barrels.	274,759	427,534	$9 85 to 11 65	$5 50 to 12 00
Rye flour ..... barrels.	415	693	8 00 to 8 50	6 25 to 6 40
Corn meal ..... barrels.	30,520	27,533	8 25	.....
Wheat ..... bushels.	128,960	3,319,180	2 05 to 2 33	1 25 to 1 65
Corn ..... bushels.	101,046	58,519	1 60 to 1 79½	65 to 80
Rye ..... bushels.	141	405	1 55 to 1 64	90 to 92
Barley ..... bushels.	.....	150	2 08	1 03 to 1 30
Oats ..... bushels.	16,643	9,875	1 08 to 1 11	54 to 56¼
Peas ..... bushels.	11,645	48,268	2 30 to 2 35	.....
Cotton ..... bales.	8,543	1,139	70 to 71	.....
Hay ..... bales.	6,228	5,454	*1 60 to 1 80	10 00 to 18 00
Hops ..... bales.	9,452	10,257	†15 to 45	†33 to 55
Leaf tobacco ..... hogsheads.	21,031	6,890	†9 to 33	.....
Leaf tobacco ..... packages.	19,471	8,070	.....	.....
Man'fac'd tobacco .. pounds.	1,398,246	624,816	50 to 1 10	40 to 1 40
Petroleum ..... gallons.	1,762,850	3,505,924	62½ to 63	.....
Pork ..... barrels.	29,720	35,398	32 25 to 34 50	27 50 to 29 50
Beef ..... barrels.	9,501	6,721	17 00 to 20 00	14 00 to 17 00
Beef ..... tierces.	21,413	25,052	.....	.....
Cut meats ..... pounds.	13,016,194	39,938,575	17¼ to 19¼	14½ to 23½
Butter ..... pounds.	5,404,808	4,702,200	18 to 37	18 to 28
Cheese ..... pounds.	8,310,927	6,712,496	18 to 24	18 to 25
Lard ..... pounds.	8,865,962	8,964,655	18¾ to 22	21 to 21¼
Tallow ..... pounds.	6,695,449	9,098,280	14 to 14¼	12 to 13½

* Per 100 lbs. † Per pound.

METEOROLOGY.

FROM THE SMITHSONIAN INSTITUTION.

FEBRUARY, 1865.

Table showing the highest and lowest range of the thermometer, (with dates prefixed,) the mean temperature, and amount of rain, (in inches and tenths,) for February, 1865, at the following places, as given by the observers named. The daily observations were made at 7 o'clock a. m. and 2 and 9 p. m.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
MAINE.								
				°		°	°	*In.*
Steuben	Washington	J. D. Parker	23, 26	40	12	— 7	23.4	3.78
Lee	Penobscot	Edwin Pitman	23	45	12	—20	22.7	1.95
West Waterville	Kennebec	B. F. Wilbur	26	46	12	—12	22.1	2.40
Gardiner	do	Rev. F. Gardiner	23, 26	43	12	—14	22.7	2.85
Lisbon	Androscoggin	Asa P. Moore	26	44	3	— 9	22.2	2.29
Cornish	York	Silas West	23	45	12	— 4	22.3	.....
Cornishville	do	G. W. Guptill	23	43	12	— 1	23.0	3.10
NEW HAMPSHIRE.								
Exeter	Rockingham	E. Nason	23, 26	52	12	2	26.1	.....
Stratford	Coos	Branch Brown	23	42	13	—20	17.0	2.32
Shelburne	do	F. Odell	23	48	12	— 6	23.5	.....
Barnstead	Belknap	Chas. H. Pitman	21	49	12	1	26.1	2.55
Claremont	Sullivan	S. O. Mead	23	48	14	—10	22.1	.....
Do	do	Arthur Chase	23	50	14	—11	22.6	2.15
VERMONT.								
Lunenburg	Essex	H. A. Cutting	26	65	13	—20	19.0	1.75
Craftsbury	Orleans	Jas. A. Paddock	23	40	13	—12	17.4	1.80
Middlebury	Addison	H. A. Sheldon	26	44	11, 13	— 8	19.9	1.58
MASSACHUSETTS.								
Sandwich	Barnstable	N. Barrows, M. D.	26	51	3	9	28.9	3.69
Topsfield	Essex	A. M. Merriam	26	52	12	13	31.5	4.05
Georgetown	do	Henry M. Nelson	26	49	12	2	25.7	.....
Newbury	do	Jno. H. Caldwell	23	51	12	3	26.9	.....
New Bedford	Bristol	Sam'l Rodman	26	47	13	6	29.5	3.79
State Lunatic Hosp'l.	Worcester	F. H. Rice	26	48	13	2	.....	.....
Mendon	do	J. G. Metcalf, M. D.	26	48	12, 13	3	26.1	.....
Baldwinsville	do	Rev. E. Dewhurst	23	43	.....	—13	.....	.....
Amherst	Hampshire	Prof. E. S. Snell	23	45	14	— 1	25.0	2.88
Springfield	Hampden	J. Weatherhead	26	48	12	0	26.3	2.47
Westfield	do	Rev. E. Davis	26	46	3, 13, 15	1	25.3	3.30
Richmond	Berkshire	Wm. Bacon	23	56	13	— 6	24.4	3.17
Williams College	do	Prof. A. Hopkins	26	45	14	— 6	23.7	1.04

Table showing the range of the thermometer, &c., for February—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
CONNECTICUT.								
				°		°	°	*In.*
Pomfret	Windham	Rev. D. Hunt	26	45	13	— 1	25.5	5.00
Columbia	Tolland	Wm. H. Yeomans	21	56	13	0	28.9	.....
Colebrook	Litchfield	Charlotte Rockwell	26	47	13	— 9	21.9	.....
NEW YORK.								
Moriches	Suffolk	E. A. and N. Smith	27	51	13	4	32.1	6.76
Fishkill Landing	Dutchess	Wm. H. Denning	23	51	13, 14	— 2	28.5	2.81
Garrison's	Putnam	Thos. B. Arden	17	41	13	— 3	24.5	2.68
White Plains	West Chester	Oliver R. Willis	26	52	13	0	28.2	.....
Deaf and Dumb Inst.	New York	Prof. O. W. Morris	26	50	13	9	32.9	4.06
Columbia College	....do	Prof. Chas. A. Joy	26	44	13	5	29.1	4.58
St. Xavier's College	....do	Rev. Jno. M. Aubier	26	50	13	4	30.3	.....
Flatbush	Kings	Eli T. Mack	26	47	13	5	29.3	3.72
Newburg	Orange	James H. Gardiner	23	50	.....	.....	.....	.....
Gouverneur	St. Lawrence	C. H. Russell	26	45	13	—29	16.3	1.57
Clinton	Oneida	H. M. Paine, M. D	26	49	13	—16	25.3	4.65
Oneida	Madison	S. Spooner, M. D	26	54	13	—28	23.9	3.36
Cazenovia	....do	Prof. Wm. Soule	26	46	13	—27	20.2	5.03
Theresa	Jefferson	S. O. Gregory	26	44	13	—31	15.2	1.29
Oswego	Oswego	Wm. S. Malcolm	26	45	13	—11	22.2	3.61
Palermo	....do	E. B. Bartlett	26	45	13	—22	20.0	2.30
Baldwinsville	Onondaga	John Bowman	26	43	13	—11	21.9	.....
Skaneateles	....do	W. M. Beauchamp	23	44	13	—14	23.8	.....
Auburn	Cayuga	John B. Dill	23	42	13	—16	22.9	4.90
Nichols	Tioga	Robert Howell	26	52	14	—16	23.3	.....
Palmyra	Wayne	Stephen Hyde	22	47	14, 15	6	28.5	.....
Geneva	Ontario	Rev. Dr. W. D. Wilson	26	45	13	0	23.9	2.48
Rochester	Monroe	Prof. C. Dewey	22	50	14	— 2	24.3	.....
Do	....do	Dr. M. M. Mathews	24	50	14	— 2	26.8	1.74
Warsaw	Wyoming	J. P. Morse	26	41	12	4	23.6	.....
Buffalo	Erie	Wm. Ives	22	46	13	—11	20.4	2.23
Jamestown	Chautauqua	Rev. S. W. Roe	21	53	12	—22	24.1	.....
NEW JERSEY.								
Paterson	Passaic	Wm. Brooks	26	49	13	0	29.3	4.60
Newark	Essex	W. A. Whitehead	26	49	13	1	29.4	4.57
New Brunswick	Middlesex	Geo. W. Thompson	26	52	13, 14	3	28.6	.....
Burlington	Burlington	John C. Deacon	26	56	13	— 2	30.9	3.80
Progress	....do	Thos. J. Beans	26	49	13	2	29.1	4.90
Mount Holly	....do	Dr. M. J. Rhees	26	56	13	3	31.6	.....
Haddonfield	Camden	Jas. S. Lippincott	26	55	13	3	31.2	4.33
Greenwich	Cumberland	R. C. Sheppard	26	57	13	2	32.2	4.62
PENNSYLVANIA.								
Fallsington	Bucks	Ebenezer Hance	26	51	13	2	30.7	4.80
Philadelphia	Philadelphia	Pf. J. A. Kirkpatrick	26	54	13	4	32.4	5.49
Germantown	....do	Thos. Meehan	17	50	13	1	.....	.....
Moorcland	Montgomery	Anna Spencer	26	50	13	0	29.5	.....
Dyberry	Wayne	Theodore Day	26	51	14	—20	21.9	.....
Nazareth	Northampton	L. E. Ricksecker	23	49	.....	.....	.....	.....
North Whitehall	Lehigh	Edward Kohler	26	46	13	3	28.1	.....
Silver Spring	Lancaster	H. G. Bruckhart	23, 26	49	13	— 6	28.3	.....

Table showing the range of the thermometer, &c., for February—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
PENNSYLVANIA—C'd.				°		°	°	*In.*
Mount Joy	Lancaster	J. R. Hoffer	26	53	14	— 5	29.9	2.10
Harrisburg	Dauphin	Dr. John Heisely	27	44	14	1	29.5	3.51
Tioga	Tioga	E. T. Bentley	26	55	14	—18	25.0	1.96
Gettysburg	Adams	M. Jacobs	27	47	14	—11	27.9	3.06
Pennsville	Clearfield	Elisha Fenton	23	45	13	—17	25.0	3.53
Connellsville	Fayette	John Taylor	21	48	13	—16	28.6	.....
Canonsburg	Washington	Rev. Wm. Smith, D.D.	21	46	13	—13	28.2	1.38
DELAWARE.								
Wilmington	New Castle	Urb. D. Hedges, M.D.	26	56	13	0	31.1	8.00
MARYLAND.								
Woodlawn	Cecil	Jas. O. McCormick	26	48	13	0	.....	5.53
Annapolis	Anne Arundel	Wm. R. Goodman	26	60	13	5	31.5	5.14
St. Inigoes	St. Mary's	Rev. J. Stephenson	26	60	13	10	37.2	2.88
Sykesville	Carroll	Miss H. M. Baer	26	50	13	2	27.6	3.50
SOUTH CAROLINA.								
Beaufort	Beaufort	Dr. M. M. Marsh	27	72	10, 13	24	48.3	3.36
Hilton Head	....do	Capt. C. R. Suter	4, 5	66	10	27	49.7	2.13
MISSISSIPPI.								
Natchez	Adams	Robert McCary	3, 17	75	10	20	52.3	12.70
KENTUCKY.								
Louisville	Jefferson	Mrs. L. Young	21	64	13	16	38.4	3.54
Chilesburg	Fayette	Samuel D. Martin	21	64	13	12	36.8	3.30
Danville	Boyle	O. Beatty	21	64	13	15	39.4	3.91
OHIO.								
Saybrook	Ashtabula	Jas. B. Fraser	22	47	13	—15	24.7	.....
Austinburg	....do	E. D. Winchester	22	45	13	—26	21.0	1.60
New Lisbon	Columbiana	J. F. Benner	26	48	13	—20	28.3	1.48
Welshfield	Geauga	B. F. Abell, A.M	22	48	13	— 6	26.8	2.30
Milnersville	Guernsey	Rev. D. Thompson	25	50	13	—10	28.0	0.75
Cleveland	Cuyahoga	Mr. and Mrs. G. A. Hyde.	22	50	13	— 5	29.1	1.46
Cuyahoga Falls	Summit	Rev. D. M. Rankin	.....	.....	13	—14	.....	.....
Wooster	Wayne	Martin Winger	21	50	13	—10	28.4	.....
Smithville	....do	J. H. Myers	21	46	13	—10	28.3	.....
Kelly's Island	Erie	Geo. C. Huntington	22	46	13	— 8	28.7	1.53
Norwalk	Huron	Rev. A. Newton	21	54	13	— 6	29.0	1.40
Westerville	Franklin	Pf. H. A. Thompson	25	54	13	— 3	29.0	1.30
Kingston	Ross	Pf. John Haywood	21	55	13	6	33.3	1.52
Portsmouth	Scioto	L. Engelbrecht	26	53	13	12	35.7	2.42
Toledo	Lucas	Dr. J. B. Trembly	22	50	13	4	29.1	1.09
Marion	Marion	H. A. True, M. D.	22	48	13	— 4	.....	.....
Urbana University	Champaign	Pf. M. G. Williams	25	50	13	2	30.1	1.97
Hillsborough	Highland	J. McD. Mathews	22	49	13	7	31.4	2.36
Ripley	Brown	Dr. G. Bambach	21	61	13	14	34.1	4.51
Bethel	Clermont	Geo. W. Crane	21, 22	52	13	8	31.2	2.58
Cincinnati	Hamilton	George W. Harper	21 25	57	13	12	35.2	2.43

Table showing the range of the thermometer, &c., for February—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
OHIO—Continued.								
				°		°	°	*In.*
College Hill	Hamilton	John H. Wilson	21, 25	56	13	8	33.0	3.78
Do	do	John W. Hammitt	21	50	13	10	33.6	3.13
MICHIGAN.								
Pontiac	Oakland	James A. Weeks	22	48	13	— 9	26.2	.....
Monroe	Monroe	Miss F. E. Whelpley	22	54	12	3	29.7	0.26
State Agric'l College	Ingham	Prof. R. C. Kedzie	21	44	13	— 1	26.8	1.76
Jackson	Jackson	Dr. F. M. Reasner	22	44	13	0	26.1	.....
INDIANA.								
Vevay	Switzerland	Chas. G. Boerner	21	63	13	14	37.5	.....
Pennville	Jay	Miriam Griest	21	58	12, 13	8	30.6	.....
Spiceland	Henry	Wm. Dawson	21, 22	53	9	15	32.5	2.40
Madison	Jefferson	Rev. S. Collins	21	62	13	20	39.3	3.50
New Albany	Floyd	Dr. E. S. Crozier	26	64	13	17	39.1	1.50
South Bend	St. Joseph	Reuben Burroughs	21	51	12	9	30.8	2.05
Indianapolis	Marion	W. W. Butterfield	21	60	13	14	33.1	.....
Do	do	Royal Mayhew	21	59	12	18	34.7	2.94
Rensselaer	Jasper	Dr. J. H. Loughridge	21	56	9	11	31.0	3.28
Bloomingdale	Parke	Miss M. A. Hobbs	21	64	9	14	34.8	.....
New Harmony	Posey	John Chappellsmith	21, 25	65	13	20	38.4	2.82
ILLINOIS.								
Chicago	Cook	Samuel Brookes	21	46	9	8	24.7	.....
Riley	McHenry	E. Babcock	21	48	12	5	28.4	5.39
Sandwich	De Kalb	Dr. N. E. Ballou	21	56	12	11	32.7	3.50
Ottawa	La Salle	Mrs. E. H. Merwin	21	54	12	12	29.3	3.99
Clinton	De Witt	C. H. Moore	.....	.....	9	8	.....	.....
Centralia	Marion	H. A. Schauber	3	65	9	15	.....	.....
Winnebago	Winnebago	James W. Tolman	21	46	12	5	28.3	3.25
Wyanet	Bureau	E. S. and Miss Phelps	21	54	12	8	30.8	3.40
Tiskilwa	do	Verry Aldrich	21	53	9	13	31.9	.....
Hennepin	Putnam	Smiley Shepherd	3	48	12	8	29.0	.....
Peoria	Peoria	Frederick Brendel	21	56	9, 12	14	34.6	4.01
Pekin	Tazewell	J. H. Riblett	21	57	9	10	33.0	4.82
Springfield	Sangamon	G. M. Brinkerhoff	21	62	9	15	36.8	.....
Waverly	Morgan	T. Dudley	20, 21, 25.	53	9	8	32.8	5.85
Galesburg	Knox	Prof. W. Livingston	21	46	12	10	30.5	2.72
Manchester	Scott	Dr. John and Miss Grant.	21	60	9	14	35.9	5.23
Augusta	Hancock	S. B. Mead, M. D.	20	49	9	11	31.7	2.82
WISCONSIN.								
Manitowoc	Manitowoc	Jacob Lüps	21	43	12	4	28.4	2.05
Milwaukee	Milwaukee	I. A. Lapham, LL.D.	22	50	12	5	27.6	3.58
Do	do	Carl Winkler	21	42	12	5	27.7	.....
Green Bay	Brown	Freid'h Deckner	21	42	12	3	25.1	1.93
Geneva	Walworth	William H. Whiting	3	42	12	4	27.0	.....
Delavan	do	Leveus Eddy	21	49	12	4	27.1	2.32
Embarrass	Waupacca	E. Everett Breed	1	40	12	— 5	25.3	.....

Table showing the range of the thermometer, &c., for February—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
WISCONSIN—Cont'd.				°		°	°	*In.*
Baraboo	Sauk	M. C. Waite	3,18,20, 21.	42	12	6	29.1	.....
Beloit	Rock	Henry D. Porter	21	47	12	4	27.3	1.17
MINNESOTA.								
Beaver Bay	Lake	C. Wieland	21	39	5	—11	21.3	1.20
St. Paul	Ramsey	Rev. A. B. Paterson	21	44	5	— 3	24.4	1.85
Minneapolis	Hennepin	Wm. Cheney	21	43	19	— 7	23.4	.....
New Ulm	Brown	Charles Roos	21	43	5	— 6	22.0	1.64
IOWA.								
Lyons	Clinton	Dr. P. J. Farnsworth	3, 16, 21	42	9, 12	10	29.2	8.50
Dubuque	Dubuque	Asa Horr, M. D.	21	45	12	8	28.6	2.19
Muscatine	Muscatine	J. P. Walton	21	48	12	9	29.7	2.90
Fort Madison	Lee	Daniel McCready	20, 21	47	9, 12	11	31.5	3.62
Monticello	Jones	Chauncey Mead	3	42	12	3	26.0	2.28
Mount Vernon	Linn	Alonzo Collins	21	43	5	6	28.1	.....
Iowa City	Johnson	Prof. T. S. Parvin	21	48	5, 9	10	31.5	3.15
Independence	Buchanan	A. C. Wheaton	21	42	9	2	23.0	7.00
Waterloo	Black Hawk	T. Steed	16	46	19	4	27.3	.....
Iowa Falls	Hardin	N. Townsend	21	45	19	4	25.2	6.27
Algona	Kossuth	Dr. F. and Miss McCoy.	21	46	5	— 1	22.9	6.25
MISSOURI.								
St. Louis	St. Louis	F. H. Stuntebeck	21	61	9	19	38.4	3.33
Allenton	....do	A. Fendler	20	62	9	7	35.1	4.27
Athens	Clark	J. T. Caldwell	1	65	10	16	37.3	5.98
Canton	Lewis	George P. Ray	21	56	9	9	32.2	3.16
Harrisonville	Cass	John Christian	20	60	8, 9	16	34.0	3.20
KANSAS.								
Olatha	Johnson	W. Beckwith	20	62	9	8	32.2	5.49
Agricultural College	Riley	H. L. Denison	20	58	26	13	35.2	2.21
Fort Riley	Davis	James H. Pine	11	60	26	18	40.0	1.55
NEBRASKA.								
Elkhorn	Washington	John S. Bowen	2	45	5, 7	12	28.6	.....
Bellevue	Sarpy	Rev. Wm. Hamilton	2	47	7	14	30.7	4.00
Nursery Hill	Otoe	R. O. Thompson	2, 20	48	5	10	29.3	7.75
Addenda—Jan., 1865.								
KENTUCKY.								
Danville	Boyle	O. Beatty	21	57	1, 28	1	29.2	4.12
NEBRASKA.								
Elkhorn	Washington	John S. Bowen	14	47	26	—12	21.2	.....
UTAH.								
Great Salt Lake City	Great Salt Lake	W. W. Phelps	2	45	25	— 2	24.0	1.22
St. George	Washington	H. Pearce	30,	65	23	14	42.0	2.40
CALIFORNIA.								
Meadow Valley	Plumas	Mrs. M. D. Smith	15	66	22	10	34.0	11.10

Table showing the average temperature and fall of rain (in inches and tenths) for the month of February in each year named, and for the five years first named, collectively, with the average number of places in each State in which the observations were made.

States and Territories.	Av. number of places.	Averages, 1855.		Averages, 1856.		Averages, 1857.		Averages, 1858.		Averages, 1859.		Av. for five years.		Averages, 1864.		Averages, 1865.	
		Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.
		Deg.	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*
Maine	5	16.2	7.25	17.2	1.94	26.4	7.88	15.4	2.04	21.9	3.73	19.4	4.57	27.4	1.58	22.6	2.73
New Hampshire	4	18.8	5.64	17.5	1.53	28.8	2.52	16.6	1.60	23.7	2.26	21.1	2.71	21.9	1.72	22.9	2.34
Vermont	4	17.7	0.98	14.9	0.94	27.8	3.04	14.1	1.20	22.8	1.54	19.5	1.54	24.4	1.44	18.8	1.69
Massachusetts	12	21.2	3.38	20.8	1.09	32.6	2.51	22.4	1.68	28.3	4.17	25.1	2.57	30.5	1.18	26.7	3.05
Rhode Island	1	22.1	4.05	18.7	0.90	32.7	3.26	24.5	2.80	36.6	1.85	26.9	2.55	.....	.....	.....	.....
Connecticut	4	19.7	4.10	23.0	1.32	32.8	1.45	23.3	2.16	29.3	3.80	25.6	2.57	29.2	1.00	25.4	5.00
New York	18	18.0	1.83	15.6	8.82	32.7	2.45	21.5	2.00	29.8	2.41	25.5	3.50	28.9	1.63	25.7	3.68
New Jersey	4	25.1	3.26	23.7	0.84	37.1	1.77	26.4	2.51	33.4	3.48	29.1	2.37	32.8	0.51	30.3	4.47
Pennsylvania	19	23.0	2.59	22.2	1.14	36.4	1.54	25.6	1.90	33.6	3.13	28.2	2.06	30.8	0.97	27.0	2.87
Delaware	1	.....	.....	25.1	.....	39.5	.....	32.5	1.68	.....	4.38	32.4	3.03	.....	.....	31.1	8.00
Maryland	5	26.2	2.07	26.1	0.84	40.4	0.68	27.7	1.64	36.9	3.49	31.5	1.74	34.9	0.71	32.1	4.26
District of Columbia	1	27.0	.....	27.0	0.64	42.0	0.65	31.0	1.67	39.4	3.54	33.3	1.30	36.3	0.36	.....	.....
South Carolina	6	44.2	1.46	45.9	2.06	57.4	1.01	46.3	6.60	51.4	3.92	49.0	3.01	52.0	.....	49.0	2.75
Tennessee	2	35.4	1.30	33.3	2.90	52.5	2.65	36.8	3.21	46.7	7.66	40.9	3.51	.....	.....	.....	.....
Kentucky	4	30.5	0.86	28.2	2.08	46.5	3.14	30.2	3.06	40.0	7.56	35.1	3.34	37.0	1.72	38.2	3.58
Ohio	19	23.7	1.70	23.2	1.92	39.8	2.50	24.5	2.30	34.0	4.21	29.0	2.53	31.0	1.31	29.9	2.12
Michigan	7	17.0	1.59	14.2	1.17	27.6	4.26	19.0	2.17	27.7	1.69	21.1	2.18	26.6	1.05	27.2	1.01
Indiana	4	27.6	0.75	24.2	0.77	41.9	4.60	25.8	2.00	37.0	5.16	31.3	2.66	31.6	1.44	34.7	2.93
Illinois	13	22.7	0.82	21.3	1.48	34.0	5.18	19.6	1.76	29.7	2.10	25.5	2.27	30.0	0.80	31.4	4.09
Wisconsin	9	13.1	1.23	15.4	0.40	25.8	2.77	16.0	0.89	23.3	1.44	18.7	1.35	23.6	1.27	27.2	2.23
Minnesota	3	7.7	.....	12.1	.....	10.7	3.30	10.1	0.70	14.6	0.58	11.0	1.33	22.5	.....	22.8	1.56
Iowa	8	18.3	1.71	16.1	1.33	27.2	5.30	16.5	1.64	26.4	1.92	20.9	2.38	26.6	0.47	27.5	4.68
Missouri	2	29.9	0.63	26.0	3.64	42.1	6.29	29.2	1.81	36.9	5.35	32.8	3.54	36.7	0.67	35.4	3.99
Nebraska Territory	3	.....	.....	.....	.....	.....	.....	17.3	0.80	23.8	0.68	20.5	0.74	31.2	.....	29.5	5.88
Kansas	3	.....	.....	.....	.....	29.6	3.60	25.2	0.51	34.6	0.42	29.8	1.51	39.6	.....	35.8	3.08
California	2	52.7	2.67	52.2	0.44	50.4	4.87	53.9	2.01	51.0	4.58	52.0	2.91	.....	.....	.....	.....

By a comparison of the tables of temperature in this number with those for December and January, it will be seen that in a region of territory embracing parts of New York, Pennsylvania, Maryland, and Ohio, the minimum temperature of the winter occurred about the middle of February. Near the same time a severe snow-storm prevailed in the neighborhood of Philadelphia, which did not extend into New England, and to but few stations west of Pennsylvania. In the notes below, this snow, with the depth to which it fell, is mentioned at all the stations where it is given in the registers. It will also be observed that the amount of snow which fell in February, as was also the case in January, was much larger in the eastern than in the western portion of the country.

Cornishville, Maine.—Twenty-five inches of snow in February; February 28, snow three feet deep on a level; have had but few winds for the last two months to drift the snow into heaps.

Lee, Maine.—Eleven and a half inches of snow during the month.

Lisbon, Maine.—Snow about three feet deep on the 28th of February; fifteen inches fell during the month; near the end of the month the grave-digger found the ground in the graveyard frozen about three inches in depth; the graveyard is fairly exposed to the winds and cold.

West Waterville, Maine.—Twenty-three inches of snow during the month.

Standish, Maine.—Amount of snow during the month, seventeen inches; three feet deep on the 28th, covered with a strong crust.

Cornish, Maine.—Twenty-two inches of snow.

Steuben, Maine.—February 28, ground probably not frozen over two inches, the swamps not in the least, and say two feet of very solid heavy snow on the ground; twelve inches and eight-tenths of snow during the month.

Gardiner, Maine.—The sleighing has been good, and the river frozen throughout the month. Measurements of the ice show, in a place where the snow has mostly blown off, three inches of snow-ice, and twenty-one and a quarter inches of black-ice—in all, twenty-four and a quarter inches of ice; and where the snow has lain of average depth, six inches of snow on the surface, then three inches of snow-ice, then two and a half of water, then six and a half of snow-ice, and below all six and a half inches of black-ice. The amount of snow which fell during the month was nineteen and a half inches.

Claremont, New Hampshire.—A remarkable even winter in this region; no night very cold; the coldest, eighteen degrees below zero, and until the warming sun of February no thawy days. No January thaw at all. Several times all signs indicated an extensive thaw, but a change of wind would soon bring around cold weather again. It might be said that during every day of the three winter months of 1864–'65 the sleighing and sledding were perfect—a most remarkable circumstance, which does not happen even here more than once in several seasons. Fall of snow during February, fifteen inches.

Shelburne, New Hampshire.—February 15: Ice on the Androscoggin river twenty-two inches thick; water seven to eight feet deep, and filled with anchor-ice from top to bottom. Fall of snow during the month, eighteen inches and eight-tenths.

Stratford, New Hampshire.—Fifteen and a half inches of snow fell in February.

Barnstead, New Hampshire.—Twenty-three and a half inches of snow fell during the month.

Lunenburg, Vermont.—Snow averaged about four and a half feet deep in February. The great depth of snow renders travelling bad, and in many places it is much drifted. Seven inches fell during the month.

Craftsbury, Vermont.—Fall of snow in February was seventeen inches.

Middlebury, Vermont.—Fourteen and a half inches of snow fell in February.

Sandwich, Massachusetts.—Two and a half inches of snow in February.

Richmond, Massachusetts.—Ten inches and one-eighth of snow fell in February.

Westfield, Massachusetts.—It has been good sleighing every day since the 14th of December.

Amherst, Massachusetts.—Nine and a half inches of snow fell during February.

Worcester, Massachusetts.—Fall of snow during the month, eight and a half inches.

New Bedford, Massachusetts.—February 28: The harbor below the bridge has remained unobstructed by ice, the ferry-boat breaking the ice which formed on her route; it was driven out daily by the wind and tide. North of the bridge the river has remained chiefly frozen, affording unusual facilities for skating. No snow on the ground or trees, but that which fell this afternoon and evening; but little frost in the ground.

Baldwinsville, Massachusetts.—Seven inches of snow fell during the month.

Mendon, Massachusetts.—February 26: Sleighing (now the eleventh week) gone.

Topsfield, Massachusetts.—February 28: Six inches of snow still on the ground; sleighing good. Fourteen inches of snow fell during the month; one inch and one-tenth on the 12th.

Columbia, Connecticut.—Eight inches of snow fell in February.

Colebrook, Connecticut.—Twelve inches of snow fell in February; two feet of snow on the ground at the end of the month.

Clinton, New York.—Twenty-eight inches of snow fell during the month; nine inches on the 11th.

Rochester, New York.—Sleighing all the month and most of January. The melting of the snow in the last week did not uncover the earth nor destroy the sleighing, except in the middle of the city. The snow of the 28th made good sleighing on all sides. Perhaps fifteen inches of snow fell in the month. (*Dewey.*)

Rochester, New York.—Twenty-four inches of snow fell during February; one inch on the 12th. (*Mathews.*)

New York, New York.—Fall of snow during the month, thirteen and three-quarter inches; four inches on the 12th.

Cazenovia, New York.—Forty-six and one-tenth inches of snow fell in February; three inches on the 11th. Snow every day from the 4th to the 11th, inclusive.

Skaneateles, New York.—February 28: Thaw every day the past week. Depth of snow fallen during the month, seventy-five inches. Snow fell on twelve days; fifteen inches fell on the 6th, eighteen inches on the 8th, fifteen inches on the 9th, and six inches on the 11th. Snow every day from the 4th to the 11th, inclusive.

Gouverneur, New York.—Depth of snow-fall during the month, fourteen inches.

Auburn, New York.—Forty-nine inches of snow fell in February; fourteen inches of it on the 8th, and three inches on the 11th. Cayuga lake frozen over on the 14th and 15th, and crossed on the ice by great numbers of persons—a very rare occurrence.

Geneva, New York.—Fall of snow during the month, twenty-seven inches.

Fishkill on Hudson, New York.—February 20: Ice on the river, fifteen inches. 28th: Ice weak on the river; good crossing for teams since the 25th of January; sleighing ended, after lasting eleven weeks; very little frost in the ground. Twelve inches of snow fell during the month; one inch on the 12th.

Oswego, New York.—Twenty-eight and a half inches of snow fell in February; one inch on the 12th.

Newburg, New York.—February 28: The river is still closed; sleighs still cross; a drove of cattle crossed on the 25th.

Moriches, New York.—February 21: The frost has been more than usually deep in the ground this winter, the water in our ponds being covered with ice for a long time from nine and a half to ten inches thick. We are too near the ocean to have snow remain long. 28th: The ice on our mill-ponds decreased rapidly for two or three days and is all gone to-day, but the frost is not all out of the ground, being, on an average, about eleven inches in our sandy regions. Two and a quarter inches of snow fell during the month; one inch on the 12th.

Baldwinsville, New York.—Thirty inches of snow fell during the month.

Garrison's, New York.—February 28: This closes a somewhat remarkable winter. The earth has remained covered with snow since the 10th of December, which must prove of great advantage to the grain and grass crop of the coming season in this district. In the meadows and on the woodland the frost is only three inches down, but in exposed places it has penetrated eighteen inches. The Hudson at this point has been frozen sixteen inches. The river opened to-day. Fall of snow during the month, eleven inches and twenty-nine hundredths; half an inch fell on the 12th.

Jamestown, New York.—Fall of snow during the month, twenty-three inches.

Oneida, New York.—Fall of snow during the month, thirty-two inches; one inch fell on the 11th.

Theresa, New York.—Fall of snow during the month, eighteen inches and seven-tenths.

Nichols, New York.—The present February has been the coldest for some years; crossing the Susquehanna river on the ice all the month, and snow from two to two and a half feet deep. The thaw did not fairly commence until the 21st, and hardly amounted to anything until the 25th and 26th, when streams rose, but ice did not go down stream. Side-hills in some localities begin to be bare.

South Trenton, New York.—Fall of snow in February, twenty-four inches. We have had a more severe winter than for a number of years past.

Palermo, New York.—This has been the coldest February for nine years. Fall of snow during the month, twenty inches.

Greenwich, New Jersey.—Eleven and a quarter inches of snow fell in February; seven and a half inches on the 12th.

Newark, New Jersey.—Twelve and a half inches of snow fell during the month; four inches on the 12th.

Haddonfield, New Jersey.—Sixteen inches of snow fell during the month; ten and a half inches on the 12th.

Mount Holly, New Jersey.—Thirteen inches of snow fell during the month; eight inches of it on the 12th.

New Brunswick, New Jersey.—February 26: Snow pretty much gone, though still on the general surface since the 30th of December. No such continuously hard winter in many years.

Progress, New Jersey.—February 20: Steam-tug forced its way with difficulty through the ice in the Delaware; river still fast, save in boat's track; it has been closed since January 17 and 18, about five weeks—a longer period than for seven years past. Found ice, where tested in channel, seven to eight inches. 22d: Ice began to drift. 26th: River nearly clear of ice; sailing vessels passing. Ten inches of snow fell during the month; five inches on the 12th.

Burlington New Jersey.—On the 12th we had the most severe snow-storm of the winter; the mercury at 18°, with a high wind, almost a gale; six inches of snow fell and drifted badly. On the 25th the ice broke up in the river Delaware at Burlington. Twelve inches of snow fell during the month.

Passaic Valley, New Jersey.—February 21: The ice in the Passaic river breaks up. Two and three-quarter inches of snow fell on the 12th; seventeen and a quarter inches during the month.

Fallsington, Pennsylvania.—February 26: Delaware river broke up the fourth time, (without injury.) Fall of snow during the month, twelve and a half inches; six inches on the 12th.

Philadelphia, Pennsylvania.—Fall of snow in February, twenty-one inches; eighteen inches of it on the 12th. The month was remarkable for the large amount of rain and snow; the total amount (5.491 inches) being nine times the quantity that fell in February, 1864, and about twice the average amount for fourteen years. The amount of precipitation for the winter (13.843 inches) was nearly six and a half inches more than last winter, and nearly four inches more than the average for fourteen years.

Byberry, Pennsylvania.—February 12: Commenced to snow before daylight; snowed and drifted all day; the worst storm for many years; ceased about sunset.

Germantown, Pennsylvania.—Forty-six inches of snow fell during the month; twenty-four inches on the 12th. At the end of the month the ground was frozen about twenty inches, the top soil of two inches thawed.

Nazareth, Pennsylvania.—Fall of snow during the month, seventeen inches; on the 12th, six inches.

North Whitehall, Pennsylvania.—Twenty inches of snow fell during the month; five inches on the 12th.

Horsham, Pennsylvania.—The ground has been covered with snow the most of the time during the month; eight inches fell on the 12th, and fourteen inches in all.

Harrisburg, Pennsylvania.—Seventeen inches of snow fell during the month; three inches on the 12th.

Mount Joy, Pennsylvania.—Seventeen inches of snow fell during the month; six inches on the 12th.

Silver Spring, Pennsylvania.—Twenty-one and a half inches of snow fell during the month; eight inches on the 12th.

Tioga, Pennsylvania.—Nineteen and a half inches of snow fell during the month; an inch and a half on the 11th.

Gettysburg, Pennsylvania.—Fourteen inches and eighty-five hundreths of snow fell during the month; two and a quarter inches on the 12th.

Grampian Hills, Pennsylvania.—Fall of snow during the month, twenty-six inches; on the 12th, five inches. The first half of the month was mostly cold, tight weather, the mercury seldom reaching 32° in the middle of the day; the latter half thawing more or less in the warm part of the day most of the time. A very heavy and deep snow was on the ground throughout the month, and now (the 28th) there is no bare ground except a few exposed places where the snow was blown off The roads are yet much blocked up with drifted snow, and in many places impassable. There were no great storms or high water during the month.

Dyberry, Pennsylvania.—Twenty-five inches of snow fell during the month; one inch on the 12th.

Connellsville, Pennsylvania.—Ten inches of snow fell during the month; one inch on the 12th.

Canonsburg, Pennsylvania.—Seven and a quarter inches of snow fell during the month; 11th and 12th snowing, not measured, probably light.

Annapolis, Maryland.—Seven and a quarter inches of snow fell during the month; two inches on the 12th.

Sykesville, Maryland.—Nine and a quarter inches of snow during the month; on the 12th, an inch and a half fell, and against fences and other obstructions it

piled up three or four feet. 23d: The ground has not been entirely clear of snow three days at one time since the 10th of December. 26th: The Patapsco river is very high, the branches and springs are overflowing.

St. Mary's City, Maryland.—February 13: St. Mary's river frozen over at this place, a circumstance of rare occurrence, having taken place only once since 1856. Remained frozen for several days; was then broken up by a thaw, but has been subsequently frozen over three or four times, when the thermometer has not been below thirty degrees during the night.

Hilton Head, South Carolina.—No snow recorded during the month. 15th: Thunder shower at 10 p. m. 18th: Planters commencing to till the ground; grass beginning to grow.

Beaufort, South Carolina.—No snow recorded. Thunder and lightning at 8 p. m. on the 15th and 25th. Quite heavy thunder at 11 a. m. on the 28th.

Natchez, Mississippi.—No snow recorded; thermometer below 32° only on the 8th, 9th, and 10th; five inches and four-tenths of rain from the 21st to the 25th; thunder on the 1st and 5th.

Danville, Kentucky.—Three and a half inches of snow on the 7th and 8th, being all that is recorded during the month.

Louisville, Kentucky.—Three-quarters of an inch of snow on the 7th, and one inch and a quarter on the 17th.

Chilesburg, Kentucky.—Seven inches of snow fell during the month.

Portsmouth, Ohio.—Six inches of snow during the month; four inches on the 9th, and two inches on the 17th. February 1: Navigation resumed on the Ohio river from here to Cincinnati. 4th: Sciota river broke up to-day, pouring out plenty of ice. Ohio river rising rapidly; shore ice fast disappearing. 9th: Ice again forming very fast in Ohio river: 12th: Navigation again partly suspended. 15th: Navigation resumed fromPittsburg to Cairo. 23d: Navigation resumed on the Ohio canal to Chillicothe. 27th: Ohio river out of its banks.

Cleveland, Ohio.—Eight and six-tenths inches of snow during the month. Severe gale on the 12th between 2 and 6 a. m., with three inches of snow.

New Lisbon, Ohio.—Nine and a quarter inches of snow during the month; two inches on the 12th. February 28: Streams high; ice all gone; considerable old snow lying in the woods, and north sides of hills, fences, &c.

Toledo, Ohio.—Ten and three-quarter inches of snow fell during the month; three-quarters of an inch on the 12th.

Kelley's Island, Ohio.—Four and a half inches of snow fell during the month; none after the 8th till the 15th.

Ripley, Ohio.—Four inches of snow fell during the month; one inch on the 8th, and three inches on the 17th.

Kingston, Ohio.—The only snow recorded is one inch and a third on the 17th.

Westerville, Ohio.—The only snow recorded is two inches on the 7th.

College Hill, Ohio.—One inch of snow on the 8th, and four and a quarter inches on the 16th and 17th.

Urbana, Ohio.—Five and a half inches of snow during the month; five hundredths of an inch on the 11th. February 14: Ice on the ponds sixteen and a half inches thick. 15th: Snow mostly off the ground, having covered it eight days. 19th: Snow off again, having covered the ground two days. 23d: The deep frost out of the ground in open places.

Cincinnati, Ohio.—Three inches and three-tenths of snow during the month; six-tenths on the 8th, and two inches and seven-tenths on the 17th.

Saybrook, Ohio.—February 28: Have had a remarkable amount of sleighing this winter, beginning on the 10th of January, and lasting, with little if any intermission, until the 21st or 22d of this month. Also had some sleighing in December. Lake Erie has for some time been frozen, as far out as the eye can

reach. Fall of snow in February seventeen inches; three inches on the night of the 11th and morning of the 12th.

Welshfield, Ohio.—Thirteen inches of snow during the month; three and a half inches on the 10th and 12th.

Milnersville, Ohio.—February 12: A high northwest wind prevailed this morning, with a little snow falling.

Cuyahoga Falls, Ohio.—February 12: About six o'clock this morning a very severe gale commenced blowing from the north; about two in the afternoon the wind abated, and the night of the 12th was the coldest of the season. On the 20th the snow began gradually to go away, and by the 24th was all gone.

Smithville, Ohio.—Eleven inches of snow fell during the month; two inches on the 12th. February 25: Streams free from ice for the first time this year.

Wooster, Ohio.—Six and a quarter inches of snow during the month, besides that which fell on the 12th, which could not be measured on account of being drifted.

Norwalk, Ohio.—Six inches of snow fell during the month; two inches on the 12th.

Marion, Ohio.—Five and eight-tenths inches of snow during the month; four inches on the 7th and 8th, and one inch and eight-tenths on the 27th.

Bethel, Ohio.—Eight and a quarter inches of snow during the month; three and a quarter inches on the 8th and 9th, and five inches on the 17th.

Austinburg, Ohio.—February 13: Thermometer twenty-six below zero, the lowest ever known here. The only snow recorded is five inches and a quarter on the 8th.

Homestead, Michigan.—February 3: The snow is to-day about twenty-two inches deep, and has not been less than six inches at any time since the first week in December. The fall of snow just at this place is greater than in the immediate vicinity of Lake Michigan. We have very little fog at any time during the year.

Lansing, Michigan.—Nine and a half inches of snow fell during the month; one inch on the 11th.

Pontiac, Michigan.—Eleven inches of snow during the month; two inches in the night of the 11th.

Monroe, Michigan.—Only two inches of snow recorded during the month, which fell from 4 a. m. of the 7th to 4 a. m. of the 8th.

Spiceland, Indiana.—Two and one-tenth inches of snow during the month; none after the 9th till the 15th.

Madison, Indiana.—The only snow recorded is on the 17th, when three inches fell.

New Albany, Indiana.—No snow recorded except a slight one on the 7th. Thunder and lightning with heavy storm of wind and rain on the evening of the 25th.

Pennville, Indiana.—Two and a half inches of snow fell on the 16th; snow almost gone in the roads at 9 p. m. 17th; two inches fell on the 28th.

New Harmony, Indiana.—Slight fall of snow on the 7th and 16th. Lightning with two or three thunder claps at 6½ a. m. on the 25th; rain from the preceding night till 9 a. m.

Vevay, Indiana.—Very light snow on the 7th and 17th.

South Bend, Indiana.—Twelve inches and nine-tenths of snow fell during the month; two inches and three quarters on the 11th.

Rensselaer, Indiana.—Six and three-quarter inches of snow during the month; a quarter of an inch on the 11th.

Indianapolis, Indiana.—Four inches of snow during the month; it fell on the 8th, 17th, and 27th. Lightning in the southwest on the 25th. Average depth of ground frozen full three feet.

Riley, Illinois.—Eight and a half inches of snow fell during the month. On the 11th the wind was SW. all day till 6 p. m., when it veered to NW., blowing very hard and squally for two hours. The record of this month shows that it has been the most even temperature and the warmest February in eleven years, and the greatest amount of rain and melted snow; the mean temperature of ten years previous for February being 21.73°, and the mean of rain and melted snow, the same time, being 2.52 inches. Another peculiarity of the month has been manifest by the absence of the usual thick frost that would hang a half inch thick upon ever hair, straw, or twig, and a singularity of the winter occurs in the continuance of the frost in the ground, which froze up about the 1st of December, and has not thawed to break through the frost since. The mud is now six inches deep, lying upon the solid frost. It is believed that the frost is deep in the ground, as the ground has been bare or nearly so all winter. A similar circumstance occurred eight or ten years ago, and corn planted at the usual time rotted; was replanted and rotted. It was then observed that the white oaks had not yet begun to leaf, but then the leaf started; and seed, just the same as had rotted twice, now grew without any further trouble. It was ascertained that the frost had remained in the ground up to the 1st of June.

Sandwich, Illinois.—Five inches of snow fell during the month. An inch and a half of rain fell on the 21st, which was the most considerable rain we have had for a period of six months. Indeed but little moisture, snow and all, has fallen upon the earth since August last. An inch also fell on the 25th. The aggregate fall this month is above any since August. It was timely. Wells were beginning to fail in many portions of the country.

Tiskilwa, Illinois.—Seven inches of snow fell during the month. Heavy rain in the night of the 21st. Bureau creek higher than it has been since 1844.

Wyanet, Illinois.—Nine and a half inches of snow during the month.

Waverly, Illinois.—Two inches of snow on the 15th, and three inches on the 17th; also light squalls of snow on the 8th and 27th. February 15, greatest depth of ground frozen during the winter, twenty inches.

Hazel Dell, Illinois.—A few distant reports of thunder were heard in the west between 3 and 4 o'clock p. m. of the 25th—the only thunder heard this winter. Water streams were effectually cleared of ice about the middle of the month.

Elmore, Illinois.—February 2: Spoon river rising very rapidly; ice breaking up; ice solid in the river till yesterday. February 14: Ground frozen to the depth of two feet seven inches. February 23: Spoon river three feet deep over the bottom lands.

Ottawa, Illinois.—Four and a half inches of snow during the month. February 21: Hard rain-storm; the Fox river entirely clear of ice, the ice breaking up in the Illinois river, also the streams much swollen, and the frost all coming out of the ground. February 28: Large fields of ice moving down the Illinois river.

Clinton, Illinois.—February 28: It is wet and very muddy; frost not all out of the ground. No spring wheat sowed yet; last year most of it was sowed in February. The winter has been an unusually severe one for fall wheat; no snow to protect it to any extent, and we think it badly winter-killed.

Winnebago, Illinois.—Fall of snow during the month, eight inches and seven-tenths.

Augusta, Illinois.—Five and a half inches of snow during the month. February 25: Rain with some thunder from 2 to 3 p. m.

Galesburg, Illinois.—Three and a half inches of snow during the month.

Harrisonville, Missouri.—Three and two-tenths inches of snow in February. The ground has been frozen from a foot and a half to two feet deep, according to locality.

Canton, Missouri.—Three inches of snow during the month.

Athens, Missouri.—The weather in February has been very unsettled; sometimes a great deal of mud, and the next day frozen hard, and very injurious on winter grain. The ice moved out of the Mississippi river fronting Keokuk, Iowa, in the evening of the 20th; it was fourteen inches thick. In the Des Moines river the ice broke up on the 22d; ice on the mill-ponds eighteen inches; this has been the greatest winter for putting up ice for years. On the prairie the ground froze eighteen inches, and in the timber ten inches; the deepest freezing for four years. Navigation on the Mississippi river is resumed to Keokuk. At 4 p. m. of the 25th a few reports of distant thunder, low and heavy, in the west.

Allentown, Missouri.—One inch of snow on the 15th, and a quarter of an inch on the 17th. Distant thunder of short duration at 1.20 p. m. of the 21st. Barometer extremely low from 11 a. m. to 2 p. m. on the 25th.

Manitowoc, Wisconsin.—Eight and two-tenths inches of snow in February; one-tenth on the 11th.

Milwaukee, Wisconsin.—Two inches of snow on the 2d, and eight inches on the 15th.

Beloit, Wisconsin.—Five and seven-tenths inches of snow during the month. February 28: Rock river free from ice.

Delavan, Wisconsin.—Four inches of snow during the month. The winter has been extraordinary in having no thaws, and in being so uniform in temperature. Ice on the pond sixteen inches thick. The ground has been frozen nearly two feet where there was no snow.

Embarrass, Wisconsin.—Eleven and a half inches of snow fell during the month; five inches on the 25th.

Geneva, Wisconsin.—Three and a quarter inches of snow during the month. The rain on the 25th turned to snow. February 9: The ground is frozen to the depth of three feet two inches.

Green Bay, Wisconsin.—Seven inches of snow from 4.45 p. m. of the 25th to 9. a. m. of the 26th. No other snow recorded, except some snow with the rain on the 2d. February 25: Fox river partly opened.

Rural, Wisconsin.—Eight inches of snow during the month; four inches on the 25th.

Baraboo, Wisconsin.—Twenty-four inches of snow during the month; ten inches on the 16th and 17th, and ten inches on the 25th to the 27th.

Beaver Bay, Minnesota.—Ten inches and four-tenths of snow fell during the month, on the 3d, 16th, and 21st.

St. Paul, Minnesota.—Seven and a half inches of snow during the month; five inches on the 14th and 15th.

Minneapolis, Minnesota.—Six and a half inches of snow from the 13th to the 17th. Several other falls recorded, but depth not given—supposed to be light.

New Ulm, Minnesota.—Six and three-eighths inches of snow during the month; six inches of it from the 13th to the 17th.

Iowa City, Iowa.—Five and nine-tenths inches of snow during the month; three inches and four-tenths on the 26th and 27th.

Monticello, Iowa.—Eleven inches of snow fell during the month, all after the 13th, on which day the prairies were clear of snow, except drifts along the fences, &c.

Muscatine, Iowa.—Seven inches of snow during the month; four inches on the 27th. February 22: The ice in the river started above the city and jammed up again. The last team crossed the river last night on the ice; the first on the 12th of December, making seventy-two days of hauling. 27th: The ice started below the city, run a short distance, and stopped. 28th: There has not been snow enough all winter to make good sleighing.

Fort Madison, Iowa.—Five and seven-tenths inches of snow during the month, all after the 13th.

Spring Grove, Iowa.—Twenty-six inches and eight-tenths of snow during the month, all after the 13th. February 21: The rain of yesterday and this morning has taken all the snow away. The ground being hard frozen, it all ran off, and the river is high this evening, and still rising fast. The ice is breaking up and gorging in great piles. We had five days of good skating, and ice on the river twenty-eight inches thick. Yesterday it was good crossing; to-day it is all piled in heaps. Twelve inches and seven-tenths of snow fell on the 24th and 25th.

Lyons, Iowa.—The month has been characterized by much cloudy, stormy weather, and much snow and rain and freezing nights, leaving the roads in very bad condition. Fall of snow during the month ten inches.

Waterloo, Iowa.—February 23: Ice broke on Red river; banks nearly full. About twelve inches of snow fell during the month.

Independence, Iowa.—Fourteen and a half inches of snow fell during the month.

Algona, Iowa.—From the 14th to the 21st heavy rains mixed with snow, and by the 21st the snow, except drifts, all gone, and the river about bank full. 28th: River falling fast.

Dubuque, Iowa.—Eight and a half inches of snow fell during the month; five inches from the 13th to the 17th.

Olatha, Kansas.—Half an inch of snow fell on the 14th, and six inches on the 25th to the 27th. The ground has remained frozen all winter, and the frost is not yet out; depth of frost one foot nine inches. The Missouri river several times has been so frozen as to be crossed by loaded teams.

Manhattan, Kansas.—Snow on the 25th and 27th.

Fort Riley, Kansas.—The only mention of snow is on the 27th, when it fell with rain and hail, and was too slight to measure.